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October 23, 2002

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338

Dear Ms. Dortch:

The attached report is a response to the criticisms set for the in the above proceeding regarding the UNE Fact Report 2002. I am filing the report in this proceeding on behalf of Verizon, Qwest, SBC and Bell South.

Please let me know if you have any questions.

Sincerely,

Dee May

Attachment

cc: M. Carey
J. Miller
T. Navin
B. Olson
R. Tanner

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of the Section 251 Unbundling	)	
Obligations of Incumbent Local	)	CC Docket No. 01-338
Exchange Carriers	)	
	)	
Implementation of the Local Competition	)	
Provisions in the Telecommunications	)	CC Docket No. 96-98
Act of 1996	)	
	)	
Deployment of Wireline Services	)	
Offering Advanced Telecommunications	)	CC Docket No. 98-147
Capability	)	

UNE Rebuttal Report 2002

Prepared for and Submitted by

BellSouth, SBC, Qwest, and Verizon

October 2002

EXECUTIVE SUMMARY

This report responds to criticisms of the *UNE Fact Report 2002* and the companion *UNE-P and Investment* report; it also addresses recent assertions made by AT&T and WorldCom about the competitive impact of the UNE platform. It demonstrates that the *Fact Report*'s portrayal of facilities-based local competition is accurate, when it is not overly conservative. It also demonstrates that, while facilities-based competition is extensive and continues to grow, most of that competition emerged where or when CLECs were not using the UNE-P to any significant extent, and recent initiatives that slash UNE-P rates have severely undermined that competition, to the point where they threaten to undermine the entire industry over the longer term.

There Is Extensive Facilities-Based Competition. As of year-end 2001, CLECs were collectively serving between *16 million and 23 million* lines – including approximately *3 million* residential lines – wholly or partially over their own facilities, including, in all cases, their own local switches; CLECs were serving an additional *130 million plus* voice-grade equivalent circuits over their own networks as of that date. In the first six months of 2002, CLECs in the territories served by BellSouth, SBC, and Verizon, added between *1.2 million* and *2.4 million* lines over their own facilities (including in all cases their own local switches), and at least *11 million* additional VGE circuits. As this report demonstrates, these estimates of facilities-based CLEC lines are reliable and conservative, and not inconsistent with data that CLECs report to the FCC.

Contrary to the claims of AT&T and others, this facilities-based competition extends to residential customers. Providers of cable telephony now offer service to more than 10 percent of all U.S. homes; they actually serve more than 2 million lines; they are adding 100,000 new lines a month; and they have achieved penetration rates as high as 40 percent in some markets. While some CLECs argue that they can't duplicate the success of cable telephony, a number of carriers – including RCN, Knology, and WideOpenWest – have deployed overbuild networks to provide residential telephony, high-speed Internet access, and video services. And other carriers – such as Cavalier and Broadview – are serving residential customers using unbundled loops and their own switches.

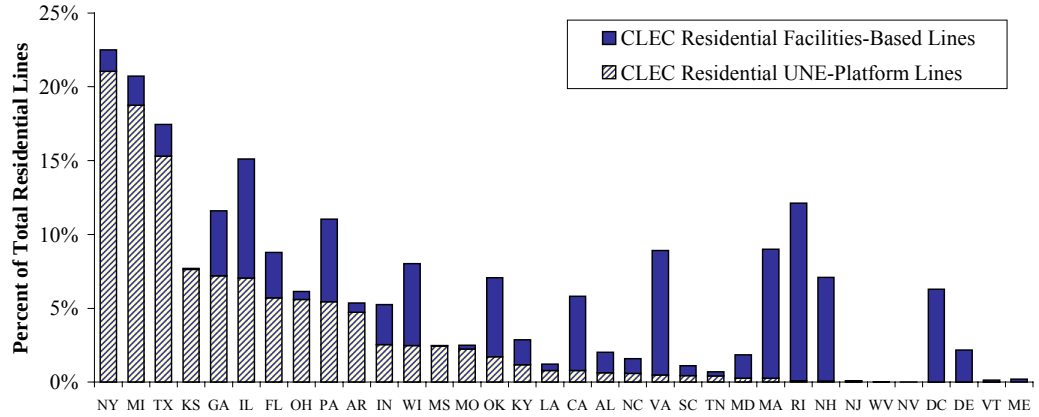
While a number of CLECs have experienced financial difficulties, CLECs as a whole continue to grow. Between January and June 2002, for example, they added between 1.2 million and 2.4 million additional lines – including 600,000 residential lines. ALTS just released a report stating that "the CLEC industry is stabilizing and is poised for a turnaround in 2003" with "publicly traded CLECs . . . on course to generating positive EBITDA in 2002 probably for the first time in their history." Many CLECs are now emerging from bankruptcy – among them, in the last 10 months alone, Teligent, Covad, Williams, McLeod, Birch, Mpower, Yipes, Advanced Radio Telecom (now First Avenue Networks), and Comdisco. Finally, there is significant intermodal competition for both residential and business customers from sources such as wireless and the Internet. A recent AT&T presentation to investors says that one of the "key issues that the RBOCs face" is "how to compete against the ~137 million wireless lines." AT&T is telling investors that "[i]nexorably, cable and wireless are going to eat into [the ILECs'] share [of the local market]."

UNE-P Impedes Facilities-Based Competition. Empirical evidence demonstrates that the UNE-P is not only unnecessary for the development of facilities-based competition, but also that it affirmatively impedes the development of such competition.

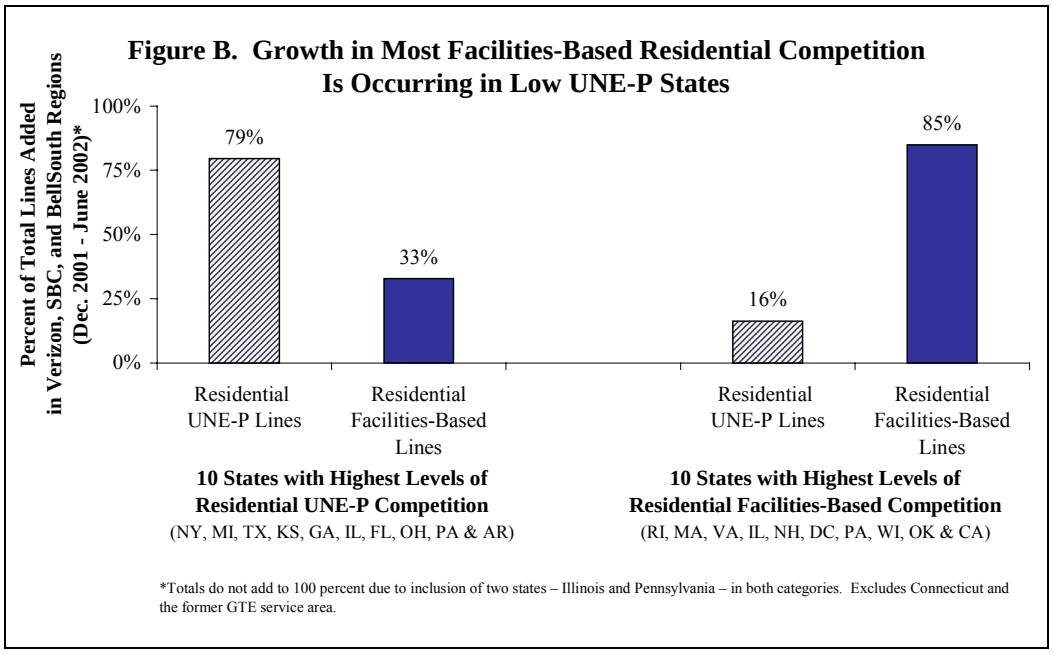
Most facilities-based competition that now exists emerged where CLECs have not used the UNE-P to any significant extent. BOC data indicate that, as of June 2002, 65 percent of all CLEC switches, 66 percent of facilities-based lines, and 69 percent of facilities-based residential lines were deployed in the states where CLECs had not used UNE-P to any significant extent. And even in the states where there is significant UNE-P usage today, most competitive facilities were put in place well before UNE-P took off. *See* Table 3, *infra*.

Empirical evidence also demonstrates that the UNE-P impedes facilities-based competition. A regression analysis of all states with significant local competition – states that account for 95 percent of all facilities-based CLEC lines, 97 percent of all UNE-P lines, and 92 percent of all CLEC switches – demonstrates that there is less facilities-based competition in states where there is more UNE-P usage. Moreover, the negative correlation between UNE-P usage and facilities-based competition is particularly evident in residential markets, which have until recently been the most heavily targeted by UNE-P providers. *See* Figure A. The 10 states with the highest levels of residential UNE-P competition accounted for three-quarters of residential UNE-P growth over the past six months, but only a third of the growth in facilities-based residential lines. *See* Figure B. The 10 states with the highest levels of facilities-based residential competition accounted for 85 percent of growth in facilities-based residential lines, but only 16 percent of residential UNE-P growth.

Figure A. Most States with Significant Residential UNE-P Have Low Levels of Facilities-Based Residential Competition



Excludes Qwest states, the former GTE service area, and Connecticut.



Although CLEC facilities still account for most of the local competition that has emerged to date, a number of states – under intense pressure from AT&T and WorldCom – have radically lowered their UNE-P rates, and this has sharply accelerated UNE-P growth rates. As a result, the negative effect of UNE-P on investment is now growing much worse. UNE-P is undermining incumbents and facilities-based competitors alike and jeopardizing the financial health of the entire industry.

In recent months, at least eight independent analysts – Merrill Lynch, UBS Warburg, JP Morgan, Commerce Capital Markets, Dresdner Kleinwort Wasserstein, Salomon Smith Barney, Precursor Group, and Raymond James & Associates – have concluded that the radical reductions in UNE-P prices that a number of states have implemented do not allow Bell companies to recoup their costs. These analysts estimate that Bell companies lose 50 to 60 percent of the revenues when they convert a line to UNE-P, but retain 90 percent or more of the costs. This will force the BOCs aggressively to cut capital expenditures, they predict, and will weaken an already crippled manufacturing sector. True to their predictions, SBC has announced that its 2003 expenditures will be about one-third less than its 2002 expenditures and less than half of 2001 levels.

Forcing the Bell companies to sell off their legacy network at confiscatory prices harms facilities-based competitors as well: several analysts have warned that the investment made by cable telephony providers is being devalued by the excessively discounted UNE-P prices available to other competitors.

There is no upside to this: the UNE-P is being used primarily as a vehicle for AT&T and WorldCom to serve high-end residential customers in a limited number of markets where these carriers can earn fat margins with no risk and no capital investment. AT&T and WorldCom purchase approximately 70 percent of all residential UNE-P lines nationwide, and account for nearly 80 percent of residential UNE-P purchases in the states where they have focused their

efforts. And there is no sign that these or other CLECs plan to migrate mass-market customers from UNE-P to facilities, even in markets where they have large numbers of UNE-P customers and have already deployed their own switches. In some cases, UNE-P prices are even impelling competitors to migrate customers *off* of their own networks and back on to incumbents'.

CLECs Have Extensively Deployed Their Own Local Switches, Interoffice Transport, and High-Capacity Loops. CLECs have deployed roughly 1,300 switches, and are using those switches to serve actual customers in wire centers that serve approximately 86 percent of all BOC switched access lines. No CLEC seriously challenges the count of competitive switches, or the fact that they are being used so extensively. While AT&T and a few other CLECs argue that it is not economic to use these switches to serve residential customers, CLECs – including AT&T – have already deployed switches that they are using to offer service to more than 10 percent of all U.S. homes. Although AT&T claims that it uses its switches "almost exclusively" to serve large business customers, it serves at least 1.8 million residential lines over its own switches compared to about 3 million business voice lines.

CLECs have deployed at least 184,000 route miles of fiber, most of which is used for local transport. Local fiber also is now being supplied to CLECs by carrier-agnostic wholesale suppliers, utility companies, and interexchange carriers. As of year-end 2001, one or more CLECs had obtained fiber-based collocation in BOC wire centers that contain more than half of all business lines served by the Bell companies, and in more than 60 percent of all BOC wire centers that serve over 10,000 business lines. While a few CLECs argue that the existence of fiber-based collocation in one office does not establish the existence of competitive transport between any given pair of ILEC offices, they fail to provide data demonstrating that this is not the case. It is reasonable to conclude that the presence of fiber in one central office indicates the existence of competitive transport, because central offices are points of very high traffic concentration and are even more likely to attract fiber than a customer's premises or an IXC's POP. Moreover, CLECs do not need to connect wire centers in point-to-point pairs; they can knit together local transport using a combination of their own and other competitive carriers' facilities, and have admitted that they do just that.

CLEC fiber networks also now reach a large number of commercial office buildings – approximately 30,000 nationwide – which contain an even larger number of high-volume customers. As of June 2002, CLECs served at least 167 million voice-grade equivalent circuits, the majority of which they provided over high-capacity facilities they deployed themselves. While a number of CLECs argue that the *Fact Report* overstates the number of self-supplied CLEC loops, they fail to substantiate a different number. The numbers set out in the *Fact Report* are consistent with all the evidence available from independent sources: CLECs are indeed providing tens of millions of voice-grade equivalent lines over their own facilities.

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APPENDICES

INTRODUCTION

This report responds to criticisms of the *UNE Fact Report 2002* ("*Fact Report*") and the companion *UNE-P and Investment* report; it also addresses recent assertions made by AT&T and WorldCom about the competitive impact of the UNE platform ("UNE-P"). It demonstrates that the *Fact Report*'s portrayal of facilities-based local competition is accurate, when it is not overly conservative. While facilities-based competition is extensive and continues to grow, most of that competition emerged where or when CLECs were not using the UNE-P to any significant extent, and recent initiatives that slash UNE-P rates have severely undermined that competition, to the point where they threaten to undermine the entire industry over the longer term.

Part I of this report demonstrates that there is extensive facilities-based competition, most of which emerged independently of UNE-P usage. The *Fact Report*'s estimate of facilities-based CLEC lines is reliable and conservative, and not inconsistent with data that CLECs report to the FCC. Contrary to claims made by AT&T and others, there is extensive facilities-based competition for residential customers. Providers of cable telephony now offer service to more than 10 percent of all U.S. homes; they actually serve more than 2 million lines; they are adding 100,000 new lines a month; and they have achieved penetration rates as high as 40 percent in some markets. There is also significant intermodal competition for both residential and business customers from other sources, such as wireless and the Internet. And while a number of CLECs have experienced financial difficulties, CLECs as a whole continue to grow.

Part II demonstrates that the UNE-P is impeding facilities-based competition and jeopardizing the financial health of the entire industry. The radical reductions in UNE-P prices that a number of states have implemented do not allow Bell companies to recoup their costs. Forcing the Bell companies to sell off their legacy network at confiscatory prices harms all other facilities-based competitors as well: several analysts have warned that the investment made by cable telephony providers is being devalued by the excessively discounted UNE-P prices available to other competitors. There is no upside to this: the UNE-P is being used primarily as a vehicle for AT&T and WorldCom to serve high-end residential customers in a limited number of markets where these carriers can earn fat margins with no risk and no capital investment. And there is no sign that these or other CLECs plan to migrate mass-market customers from UNE-P to facilities, even in markets where they have large numbers of UNE-P customers and have already deployed their own switches. In some cases, UNE-P prices are even impelling competitors to migrate customers *off* of their own networks and back on to incumbents'.

Part III demonstrates that CLECs have extensively deployed their own local switches, interoffice transport, and high-capacity loops. Several CLECs challenge minor aspects of the *Fact Report*'s numbers, but the numbers are accurate, and even if valid, the challenges do not begin to undermine the *Report*'s core findings. There is no serious dispute, for example, that CLECs have deployed roughly 1,300 switches, and that they are using those switches to serve actual customers in wire centers that serve approximately 86 percent of all BOC switched access lines. Nor has any serious challenge been raised to the *Fact Report*'s estimates of fiber-route miles that CLECs have deployed, or the percentage of BOC central offices now reached by competitive fiber. And while a number of CLECs argue that the *Fact Report* overstates the number of self-supplied CLEC loops, no CLEC even attempts to substantiate a different number. The numbers set out in the *Fact Report* are consistent with all the evidence available from independent sources: CLECs are indeed providing tens of millions of voice-grade equivalent lines over their own facilities.

I. There Is Extensive Facilities-Based Competition.

As the *Fact Report* demonstrated, there is extensive facilities-based competition in local markets throughout the country; the competition is coming from both traditional CLECs and from wireless, cable, and Internet-based competitors.

- As of year-end 2001, CLECs were collectively serving between *16 million and 23 million* lines – including approximately *3 million* residential lines – wholly or partially over their own facilities, including, in all cases, their own local switches;[1] CLECs were serving an additional *130 million plus* voice-grade equivalent circuits over their own networks as of that date.[2] In the first six months of 2002, CLECs in the territories served by BellSouth, SBC, and Verizon, added between *1.2 million* and *2.4 million* lines over their own facilities (including in all cases their own local switches), and at least *11 million* VGE circuits. *See* Tables 1 & 2.

- As of year-end 2001, cable telephony providers were offering service to approximately *10 million* homes and were serving at least *1.5 million* lines over their own networks;[3] in first six months of 2002, they added at least *600,000 residential* lines over their own facilities – an average of approximately *100,000* lines per month.[4]

- As of year-end 2001, CLECs were using their own switches to serve local customers in wire centers that serve approximately *86 percent* of the Bell companies' access lines, including *84 percent* of their residential lines.[5]

- As of year-end 2001, ILECs had lost at least 10 million additional lines to wireless carriers;[6] more recent analyses indicate that approximately *26 percent* of all wireless minutes were previously carried on wireline networks, and that *45 percent* of mobile users indicate that they use their wireless instead of wireline at least some of the time.[7]

- As of year-end 2001, ILECs were losing significant additional lines and revenues to Internet-based services such as e-mail and instant messaging, which now

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[1] *See UNE Fact Report 2002* at II-4.

[2] *See id.* at I-8.

[3] *See id.* at II-11.

[4] *See* NCTA, *Residential Cable Telephony Subscribers*, http://www.ncta.com/industry_overview/indStats.cfm?statID=13.

[5] *See UNE Fact Report 2002* at II-6.

[6] *See id.* at IV-12; S. Ellison, IDC, *Wireless Displacement of Wireline Forecast and Analysis, 2001 – 2005* at Figures 9 & 10 (Dec. 2001).

[7] K. Mallinson, The Yankee Group, *Mobile Market Cries Out for Consolidation Despite High Growth in Wireline Replacement* at 3 (Sept. 2002) (emphasis added) ("*Yankee Group Mobile Market Report*").

substitute for a substantial fraction of voice traffic;[8] that trend has continued as the number of instant messaging users increased by more than 12 percent in the first quarter of 2002.[9]

- An October 2002 report commissioned by a CLEC trade association concludes that cable operators, interexchange carriers, and other CLECs have outspent ILECs on new network infrastructure by more than two-to-one ($103 billion versus $47 billion) since passage of the Telecommunications Act of 1996.[10]

Table 1. Lines Added on CLEC Switches between YE 2001 and June 2002*

	E911 Listings	Interconnection Trunks * 2.75
Verizon	496,000	679,000
SBC	424,000	1.3 million
BellSouth	235,000	418,000
Total	**1.2 million**	**2.4 million**

*Data for Qwest not available. Verizon data exclude Connecticut and the former GTE service area. SBC data exclude Connecticut.

[8] *See UNE Fact Report 2002* at II-26 – II-28.

[9] *See* M. Meeker, *et al.*, Morgan Stanley, Dean Witter, Investext Rpt. No. 8477344, Internet Portals/Commerce & PC Software – Industry Report at *4 (Apr. 15, 2002) (growth rate for the top four IM applications).

[10] New Paradigm Resources Group, Inc., *Measuring the Economic Impact of the Telecommunications Act of 1996: Telecommunications Capital Expenditures (1996-2001)* at Table 21, prepared for CompTel (Oct. 2002).

Table 2. Growth of CLEC Voice-Grade Equivalent Lines Reported to Investors			
	CLEC-Reported Totals		
	YE 2001	**2Q 2002**	
WorldCom	76.4 million	n/a	
AT&T	>30 million	>40 million	"UNE-P lines now represent a little over 15 percent of the voice business access lines and roughly 1 percent of the more than **40 million** DS0 equivalents." – *AT&T 2Q Earnings Conference Call* (July 23, 2002)
XO	21.2 million	20.9 million (1Q 2002)	"Voice grade equivalents: **20,932,000**" – XO Communications Inc., Form 10-Q (SEC filed May 14, 2002)
Time Warner Telecom	16.7 million	17.0 million	"DS-0 Equivalents: **16,994,000**" as of 2Q02 – Time Warner Telecom Press Release, *Time Warner Telecom Announces Second Quarter 2002 Results* (Aug. 1, 2002)
Adelphia Bus. Solutions	4.6 million (3Q 2001)	n/a	
KMC Telecom	3.6 million (3Q 2001)	n/a	
Cox	1.8 million	2.2 million	Cox residential phone customers "have more than **700,000** lines"; Cox Business Services serves "more than **1.5 million** private line VGE's." – Cox, *The Case for Cable Telephony* at 1 (Oct. 2002)
CTC	589,000	615,000	"The Company ended the June 2002 quarter with approximately **615,000** access line equivalents" – CTC Press Release, *CTC Communications Group Reports Revenue and Operating Results for the Quarter Ended June 30, 2002* (July 30, 2002)
CoreComm/ ATX	495,000 (3Q 2001)	503,500	"Toll-related Access Line Equivalents: **503,500**" as of 2Q02 – CoreComm Press Release, *ATX Communications, Inc. Announces Second Quarter 2002 Results* (Aug. 14, 2002)
Pac-West	235,000	320,000	"Total DS0 equivalent lines in service, which include wholesale and on-network retail DS0 line equivalents, were **320,042** at the end of the second quarter of 2002." – Pac-West Press Release, *Pac-West Telecom Announces Second Quarter 2002 Results* (Aug. 6, 2002)
PaeTec	233,000	310,000	PaeTec "has installed **310,056** access line equivalents . . . as of June 30, 2002." – PaeTec Press Release, *PaeTec Exceeds 310,000 Access Lines* (July 10, 2002)
Integra	>120,000	>143,000	Integra "currently serve[s] over **143,000** lines." – Integra Telecom, *Business Profile – July 2002*, http://www.integratelecom.com/pdfs/BusinessProfileJuly2002.pdf
Total	**156 million**	**167 million**	

Most of the facilities-based competition that now exists emerged when and where CLECs were not using UNE-P to any significant extent:

- FCC data indicate that 67 percent of all lines provided entirely over CLEC facilities were deployed as of June 2000, compared to only 28 percent of UNE-P lines.[11]

- BOC data indicate that, as of June 2002, 65 percent of all CLEC switches, 66 percent of facilities-based lines, and 69 percent of facilities-based residential lines were deployed in the states where CLECs are not using UNE-P to any significant extent (*i.e.*, where UNE-P lines represent less than five percent of total lines within a state).[12]

- Most of the competitive facilities in states where there is significant UNE-P usage were put in place well before UNE-P took off, *see* Table 3, and there has been little if any conversion of UNE-P lines to facilities since the rush to UNE-P began.[13]

Table 3. Even in States with Significant UNE-P, CLEC Facilities Came First

	UNE-P Penetration (as of 2Q02)	Date of Initial AT&T/WorldCom UNE-P Entry	Percent of CLEC Switches in Place Prior to AT&T/WorldCom Entry*
New York	14.0%	Feb. 1999 (WorldCom); Dec. 1999 (AT&T)	56% (YE 1998)
Texas	13.0%	Summer 1999 (AT&T); Apr. 2000 (WorldCom)	48% (YE 1998)
Michigan	12.7%	Dec. 2000 (WorldCom); Feb. 2002 (AT&T)	96% (YE 2000)
Georgia	6.4%	May 2001 (WorldCom); Mar. 2002 (AT&T)	100% (YE 2000)
Florida	5.5%	4Q 2001 (WorldCom)	100% (YE 2000)
Illinois	5.0%	Dec. 2000 (WorldCom); June 2002 (AT&T)	100% (YE 2000)
Pennsylvania	4.5%	Sept. 2000 (WorldCom); Sept. 2002 (AT&T)	100% (YE 2000)

*Reflects percentage of CLEC switches deployed as of year-end 2001 according to New Paradigm's *CLEC Report*.

- As demonstrated in the *UNE-P and Investment* report, most of the competitive facilities in New York, the state with by far the most UNE-P, emerged well before any significant levels of UNE-P competition developed, and carriers have not converted UNE-P lines to their own facilities in that state.[14]

[11] *See* FCC, *Local Telephone Competition: Status as of December 31, 2001* at Table 3 (CLEC-owned lines) & Table 4 (UNEs with switching) (July 2002). Totals reflect percentages of CLEC-owned lines and UNEs with switching deployed as of year-end 2001.

[12] Excludes the former GTE service area and Connecticut for which data were unavailable.

[13] *See UNE Fact Report 2002* at II-17 – II-20; *UNE-P and Investment* at 4-6 & App. B.

[14] *See UNE-P and Investment* at 5-9.

- As of year-end 2001, AT&T was providing UNE-P service in only two states – New York and Texas – but it had deployed more than 200 switches in 38 other states as of that date, and was providing facilities-based residential service to residential customers in at least 14 other states.[15]

- The 10 states with the highest levels of residential UNE-P competition accounted for three-quarters of residential UNE-P growth over the past six months, but only a third of the growth in facilities-based residential lines. *See* Figure 4, *infra*. The 10 states with the highest levels of facilities-based residential competition accounted for 85 percent of growth in facilities-based residential lines, but only 16 percent of residential UNE-P growth. *See id*.

- In June 2002, AT&T's Michael Armstrong declared that state regulators got "UNE prices right" in only five states,[16] but 85 percent of all facilities-based residential lines deployed in the past six months were deployed outside of those five states.

Like the *Fact Report* itself, this rebuttal report relies on public sources and other limited sources of information available to the Bell Companies. The data are conservative, and often *understate* the extent to which CLECs have deployed their own facilities and are serving customers over those facilities. It is important to emphasize that while this report focuses on the *adoption rates* for competitive facilities, the competitive impact of those facilities is determined by their much broader *availability*.[17] And because they target high-density areas, CLECs have access to a far larger share of customers than a simple-minded comparison of ILEC and CLEC facilities might suggest. AT&T, for example, claims that it now has facilities to serve local customers in "90 cities in 68 MSAs" – but it notes that those facilities "cover[] ~70% of business local market."[18]

A. The *Fact Report*'s Estimate of Facilities-Based CLEC Lines Is Reliable and Conservative.

The *Fact Report* used two independent methods to estimate the number of lines that CLECs were serving over their own facilities as of year-end 2001.[19] It found that CLECs had submitted approximately 16 million listings to E911 databases, including 3 million for residential

[15] *See UNE Fact Report 2002*, App. B & II-12 at Table 8.

[16] C. Michael Armstrong, Chairman and CEO, AT&T, *An Executive's Perspective on the Future of Telecommunications Regulation*, statement before the American Enterprise Institute (June 11, 2002). Mr. Armstrong also suggested that, because California had recently slashed UNE rates, it should be added to that list. But California did not slash UNE rates until May 2002, so the effect of that reduction was irrelevant for at least five of the six most recent months for which data are available.

[17] *See*, *e.g.*, Comments of AT&T Corp. at 2, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 02-145 (FCC filed July 29, 2002) (stating that the focus in analyzing competition should be on the "availability of competitive alternatives").

[18] David Dorman, President, AT&T, presentation at the Morgan Stanley Global Communications Conference, at 8 (Sept. 10, 2002), http://www.att.com/ir/pdf/20020910_dorman.pdf.

[19] *See UNE Fact Report 2002*, App. A.

customers. And it found that CLECs had obtained more than 8 million interconnection trunks, conservatively assumed that each CLEC trunk serves approximately 2.75 lines, and thus inferred approximately 23 million lines served at the far end.[20]

The *Fact Report* Totals Are Not Inconsistent with Form 477 Data Reported by the FCC. Several CLECs insist that the totals in the *Fact Report* must be inaccurate because they conflict with the totals that CLECs themselves report to the FCC in their Form 477 reports.[21] Those reports indicate that CLECs served about 10 million "switched access lines" as of year-end 2001.[22]

As described in the *Fact Report*, twelve CLECs have reported to investors that they serve a total of 156 million voice-grade equivalent lines.[23] The *Fact Report* hypothesized that the large discrepancy between the 10 million lines that CLECs collectively reported to the Commission, and the 156 million plus lines that just twelve CLECs reported to their investors, might reflect the CLECs' failure to convert high-capacity lines into voice-grade equivalent lines, as the FCC requires.[24]

AT&T is the only commenter to take issue with that hypothesis. Its comments make clear, however, that the numbers reported to the FCC are even more deficient than the *Fact Report* hypothesized – those numbers simply exclude the millions of voice-grade equivalents that CLECs provide as special access and private lines over their own facilities. AT&T, for example, reports that it served 30 million voice-grade equivalent lines as of year-end 2001 – some 2.7 million business voice lines that it did report to the FCC, *plus* 27.3 million unreported special access and private lines that "consist mostly of additional services, principally private line data services that are typically OC-3, OC-12, or OC-48 circuits."[25] AT&T now argues that, while the 2.7 million lines do matter, the 27 million lines don't, because the FCC is interested only in "local access lines that can connect to the local public switched network."[26] The other 27.3 million voice-grade-equivalent lines, AT&T implies, do not connect to the local public switched network at all.

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[20] *See id.* at II-4, Table 8.

[21] *See* AT&T Reply Comments at 179-187; WorldCom Reply Comments at 142; Covad Reply Comments at 55-56.

[22] *See* FCC, *Local Telephone Competition*: *Status as of December 31, 2001* at Tables 3 & 4 (July 2002). The 10 million figure is the rounded sum of the number of CLEC-owned lines in Table 3 (6.1 million) and the number of lines provided by ILECs to CLECs without unbundled switching in Table 4 (3.7 million). *See also* WorldCom Reply Comments at 142 n.469 (adopting this same methodology).

[23] *See UNE Fact Report 2002* at I-8, Table 4.

[24] *See id.* at A-1.

[25] AT&T Reply Comments at 183 n.135.

[26] *Id.* (arguing that AT&T's attempt to "distinguish[]" between "AT&T's local service lines and its overall set of services" is "fully consistent with the data AT&T has provided to the Commission in its Form 477s.").

The FCC's rules do indeed direct CLECs separately to provide totals for special access and private lines.[27] Whether carriers in fact file complete reports for these lines to the Commission is unclear; the Commission does not, in any event, include those numbers in its *Local Telephone Competition* report, or release them to the public.[28] But – as the CLECs themselves make quite clear when reporting on the state of their business to *investors* – these lines do provide a direct measure of CLEC success in providing facilities-based competition to local customers. *See* Table 2, *supra*. As the *Fact Report* emphasized, the provision of special access and private lines defines the core of the CLEC business – this is where the largest CLECs got started, and these services still account for more than half of all CLEC revenues.[29] And, as the Commission has found, these lines compete directly with the special access and switched services that ILECs provide.[30]

The E911 Database Provides a Conservative Estimate of Facilities-Based CLEC Lines. The *Fact Report*'s low-end totals of facilities-based CLEC lines were obtained from CLEC-supplied listings in E911 databases. As the *Fact Report* explained, these databases are highly reliable because both ILECs and CLECs have strong incentives to maintain them accurately.[31] Both the FCC and the Department of Justice have repeatedly relied on E911 listings to estimate facilities-based lines in section 271 proceedings,[32] and in those proceedings, no CLEC has ever challenged E911 totals, nor disputed that E911 totals undercount lines actually served.[33] AT&T now asserts that it previously "challenged the use of E911 databases in state proceedings,"[34] but it cites only one example – a Massachusetts price-cap proceeding that occurred after the state's 271 proceedings – and AT&T neglects to note that the Massachusetts commission rejected

[27] In particular, carriers are required to report "special access lines not provided as broadband and private lines that connect an end-user premises to a telecommunications common carrier and is not provided as broadband." FCC Form 477 – Local Competition and Broadband Reporting at Line C.II-6.

[28] AT&T acknowledges, however, that "when a competitive LEC uses its own switch combined with special access to provide local service, it reports those numbers to the E911 database just as it would if it had deployed its own loops." *See* AT&T Reply Comments at 184. It is unclear how AT&T or other CLECs treat such lines for purposes of the 477 data they report to the FCC – as "switched access lines" or as "special access lines." In any case, these lines appear to be excluded from the 10 million "switched access lines" reported by FCC. That total is comprised of two categories – "CLEC-owned lines" and "UNEs without switching" – that, by definition, exclude CLEC lines served by using ILEC special access service to connect an end-user customer to the CLECs' own local switch. Thus, the discrepancy between the 10 million lines reported by the FCC and the 16-23 million lines reported by the *Fact Report* may be attributed, at least in part, to the fact that the *Fact Report* totals account for the presence of special access lines used by CLECs in place of unbundled loops, whereas the FCC totals do not.

[29] *See UNE Fact Report 2002* at I-13 – I-14 & V-20.

[30] *See*, *e.g.*, *MTS and WATS Market Structure*, Second Study and Report, FCC 89J-3, 1989 FCC LEXIS 620 (rel. Mar. 24, 1989) (noting that "high volume customers substitute special access for switched access.").

[31] *See UNE Fact Report 2002* at A-2 – A-3.

[32] *See id.* at A-3 & n.8.

[33] *See Sprint v. FCC*, 274 F.3d 549, 562 (D.C. Cir. 2001) (holding that it is appropriate to rely on BOC estimates of CLEC facilities-based lines where CLECs have failed to challenge that data despite being parties to the proceedings in which that data was presented).

[34] AT&T Reply Comments at 181 n.132.

AT&T's challenge, concluding that the E911 database "provide[s] a reasonable estimate of CLEC facilities-based competitive entry."[35]

Confidentiality rules make it impossible systematically to compare E911 data that the CLECs provide to the ILECs against the counts of facilities-based lines that the CLECs submit to the FCC. In numerous instances, however, the CLECs themselves have disclosed how many lines they provide over their own facilities. *See* Table 4. In the aggregate, those totals are *higher* than the E911-listing total set out in the *Fact Report*. *See id.* Broken down by individual CLEC, the E911 listings relied on in the *Fact Report* were lower than the CLEC-reported totals for every CLEC except two, and as to those two, the combined disparity is less than 5 percent and represents less than 120,000 lines.

[35] *Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Regulatory Plan to Succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' Intrastate Retail Telecommunications Services in the Commonwealth of Massachusetts*, Order at 84, DTE 01-31-Phase I (Mass. DTE May 8, 2002).

Table 4. Publicly Reported CLEC Line Totals vs. E911 Listings Used in the *Fact Report*		
	CLEC-Reported Facilities-Based Lines (2Q02 or most recent available)	**E911 Listings**
AT&T	2.8 million business voice lines 1.8 million cable telephony lines	
Cox	830,000	
McLeodUSA	523,852	
Choice One	426,127	
RCN Corp.	246,427	
ITC^DeltaCom	223,426	
NuVox	201,355	
TDS MetroCom	160,000	
Conversent	130,000	
CTSI	115,886	
Total	**7.5 million**	**6.9 million**
	CLEC-Reported Voice-Grade Equivalent Lines	**E911 Listings**
WorldCom	76.4 million	
XO	20.9 million	
Time Warner Telecom	17.0 million	
Adelphia Business Solutions	4.6 million	
KMC Telecom	3.6 million	
CTC	615,000	
CoreComm/ATX	503,500	
Pac-West	320,000	
PaeTec	310,000	
Total	**124 million**	**4.5 million**
E911 data exclude data for the former GTE service area and Connecticut. *Sources*: *See* Appendix B.		

In an ex parte letter filed in this proceeding, Intrado – an independent third party that manages E911 databases on behalf of both CLECs and ILECs – provides further, independent confirmation that the E911 database is a conservative measure of facilities-based CLEC lines. With respect to residential E911 listings, Intrado states that "residential subscriber line counts generally are represented accurately in the 9-1-1 database."[36] In other words, each CLEC residential listing in the E911 database represents one residential line served by that CLEC. With respect to business E911 listings, Intrado confirms that "[b]usiness line counts may be underrepresented in the 9-1-1 database if business service is provided via multi-line hunting

[36] Ex Parte Letter from Martha Jenkins, Senior Director, Intrado Inc., to William F. Caton, Secretary, FCC, CC Docket No. 01-338, at 1 (FCC filed Apr. 19, 2002) ("*Intrado Ex Parte*").

arrangements" that "associate multiple lines with a single translated telephone number."[37] Here, "the database typically will not reflect the many lines associated with that number, thereby *understating* the actual number of business lines in service."[38]

Intrado also identifies one limited scenario in which the E911 database may overstate the number of CLEC business lines: where a CLEC provides direct inward dialing ("DID") service to a customer that uses a PBX.[39] Notwithstanding a recommendation to the contrary in the National Emergency Number Association's guidelines,[40] the CLEC may opt to obtain an E911 listing for every DID number behind the PBX, rather than just a single listing for each of the trunks connecting the PBX to the CLEC's switch.[41] AT&T – the only CLEC that seriously challenges the accuracy of the E911 database – also invokes this scenario as a reason not to trust it.[42] But when AT&T made the same pitch in Massachusetts, based on the same evidence it presents here, that state's regulatory commission concluded that AT&T's claim was "not supported by substantial, much less conclusive evidence."[43]

To begin with, DID numbers account for a very small fraction of all lines – just over one percent of Pacific Bell's retail lines in California, for example.[44] Moreover, a large share of DID numbers are provided to paging carriers, which typically supply no E911 listings at all. And AT&T itself acknowledges that it obtains E911 listings for DID numbers only "when a customer with a large volume of numbers migrates to AT&T's services from another carrier," not "when a customer uses telephone numbers from a block of numbers assigned to AT&T that was originally

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[37] *Id.*

[38] *Id.* (emphasis added).

[39] DID is a service "that provides a block of telephone numbers for calling into a company's private branch exchange (PBX) system. Using DID, a company can offer its customers individual phone numbers for each person or workstation within the company without requiring a physical line into the PBX for each possible connection." Whatis.com, http://whatis.techtarget.com/definition/0,,sid9_gci213896,00.html.

[40] As AT&T notes, NENA guidelines "recommend that carriers *not* include telephone numbers for classes of service that do not generate dial tone, such as direct inward dial ("DID") numbers." AT&T's Lancaster-Morganstern Reply Decl. ¶ 12; *see also* NENA, *Recommended Data Standards for Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions* § 2.18 (Mar. 25, 2002) ("9-1-1 data included for exchange or storage for ALI retrieval should not include telephone numbers for non-generating dial tone classes of service").

[41] *See Intrado Ex Parte* at 1-2.

[42] *See* AT&T Reply Comments at 181-182, 354; AT&T's Lancaster-Morganstern Reply Decl. ¶¶ 8-16.

[43] *Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Regulatory Plan to Succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' Intrastate Retail Telecommunications Services in the Commonwealth of Massachusetts*, Order at 83, DTE 01-31-Phase I (Mass. DTE May 8, 2002) ("the effect and extent of any potential inaccuracies that may result from inconsistent reporting by CLECs to the E911 database are merely asserted by AT&T but are not supported by substantial, much less conclusive evidence. AT&T did not provide any evidence of, or suggest a method for calculating, the extent of *actual* line count inflation it asserts is caused by its practice of reporting all numbers behind a PBX to the database. AT&T merely argued that the potential for such inflation exists.").

[44] *See* Reply Affidavit of David R. Tebeau ¶ 12, *Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Dockets R.93-04-003 *et al*. (CA PUC filed Sept. 13, 2001).

provisioned by AT&T."[45] There is no reason to suppose that other CLECs use the same approach; the BOCs themselves typically adhere to the industry's guidelines. Many CLECs have a financial incentive to do so too, because they pay third parties (like Intrado) to administer their E911 listings and ILECs to provide E911 service based on contracts and interconnection agreements that charge by the listing.[46] Finally, it is worth recalling that every DID number behind a PBX represents an altogether real telephone, and would require an equally real telephone line if it were served, instead, by ILEC-supplied Centrex service. That the CLEC or its customer deploys a competitive switch or other concentrating device does not change the fact that an ILEC line has been displaced; it only changes the mix of technologies that are used to provide the competition.

Interconnection Trunks Provide a Conservative Estimate of Facilities-Based CLEC Lines. As noted above, the high-end totals of facilities-based CLEC lines were obtained by multiplying the number of interconnection trunks that CLECs have obtained by 2.75. As the *Fact Report* explained, that multiplier is based on the conservative assumptions of a study performed by SBC in 1998, which assumed that 65 percent of CLEC lines were provided to Internet Service Providers (ISPs) using a 1:1 line-to-trunk ratio, and that the remaining 35 percent were provided to business customers using a 6:1 line-to-trunk ratio.[47] Today's CLECs are serving a far higher percentage of non-ISP customers; the average line-to-trunk ratio will therefore be considerably higher than it was in 1998. AT&T, the only CLEC to challenge the interconnection trunk methodology,[48] insists that the line-to-trunk multiplier is "unsubstantiated."[49] In a California state proceeding, however, AT&T recently admitted that its own line-to-trunk ratio is actually *higher* than 2.75.[50]

B. Cable Telephony and Other Forms of Facilities-Based Residential Competition.

Having made the business decision not to use its switches and other facilities to compete for residential customers in certain areas, AT&T insists that, without UNE-P, "the only alternative to competition through UNE-P . . . IS NO COMPETITION AT ALL for residential customers."[51] It attempts to back up this claim with the assertion that, "in states where there are

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[45] AT&T's Lancaster-Morganstern Reply Decl. ¶ 12 & n.1. AT&T fails to identify how many DID numbers it has obtained through porting.

[46] *See*, *e.g.*, Agreement between New England Telephone and Telegraph Company d/b/a BA and AT&T Communications of New England, Inc., Appendix A, Part 1, Sect. Q(b) (dated Apr. 13, 1998) ("For E-911 service, AT&T will pay a monthly rate based upon the number of AT&T telephone numbers in the E-911 database.").

[47] *See UNE Fact Report 2002* at A-3.

[48] *See* AT&T Reply Comments at 182-183 & n.136; AT&T's Pfau Reply Decl. ¶¶ 25, 27.

[49] AT&T's Pfau Reply Decl. ¶ 25.

[50] *See* Affidavit of J. Gary Smith at n.5, *Application by SBC Communications Inc., Pacific Bell Telephone Company, and Southwestern Bell Communications Services, Inc. for Provision of In-Region, InterLATA Services in California*, WC Docket No. 02-306 (FCC filed Sept. 20, 2002).

[51] AT&T Reply Comments at iii (emphasis in original); *see also* UNE-P Coalition Reply Comments at 9-10; Z-Tel Comments at 77.

high UNE rates or no or poor OSS for UNE-P, no residential competition has developed."[52] The facts show otherwise.

To begin with, the *Fact Report* demonstrated that, in just the last three years, the availability of cable telephony increased by more than five-fold, to the point where approximately 10 percent of all U.S. households had access to the service as of year-end 2001.[53] The *Fact Report* also demonstrated that cable telephony is now available to virtually all households in many metropolitan markets, and throughout some entire states.[54] As of year-end 2001, there were at least 1.5 million cable telephony subscribers served by incumbent cable operators alone, plus at least several hundred thousand more served by overbuilders such as RCN and Knology.[55]

No commenter seriously disputes any of the *Fact Report*'s data regarding cable telephony, except for the several CLECs that contend that the *Fact Report* likely *understates* the extent of this form of competition.[56] Instead, AT&T asserts that cable telephony is "extremely limited in scope,"[57] "is at best a future possibility, not a current reality,"[58] and does not have "any pertinence to this proceeding."[59] But AT&T has said quite the opposite to investors, the business press, and even to this Commission in other proceedings. AT&T Broadband "today is the tenth largest local telephone company in the country."[60] "AT&T Broadband is capable of serving approximately seven million households, has enrolled over 1.15 million cable telephony customers, and is adding approximately 40,000 customers per month."[61] AT&T's providers of cable telephony "now have 115 franchise areas with greater than 25 percent penetration including dozens of communities within our largest markets. Many of these franchise areas have in fact surpassed 30 percent penetration."[62] "[W]e finally now have a national scale facilities-

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[52] AT&T Reply Comments at 7.

[53] *See UNE Fact Report 2002* at II-11.

[54] *See id.* at II-11 – II-12; *see also UNE-P and Investment* at 8-9. This evidence puts the lie to Covad's claim that the *Fact Report* failed to identify the specific markets in which cable telephony exists. *See* Covad's Murray Reply Decl. ¶ 56.

[55] *See UNE Fact Report 2002* at II-11; *see also id.* at Table 8.

[56] *See* AT&T's Pfau Reply Decl. ¶ 30 (estimating about 2.2 million cable telephony lines as of year-end 2001); WorldCom Reply Comments at 150 (citing WorldCom Comments at 35, which states that there are 1.9 million cable telephony lines).

[57] AT&T Reply Comments at 26.

[58] AT&T's Huels Decl. ¶ 31.

[59] AT&T Reply Comments at 25; *see also* WorldCom Reply Comments at 150-152; Covad's Murray Reply Decl. ¶ 56.

[60] Reply to Comments and Petitions to Deny Applications for Consent to Transfer Control at 11, *Applications for Consent to the Transfer of Control of Licenses Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-70 (FCC filed May 21, 2002).

[61] *Id. See also* AT&T, *Earnings Commentary – Quarterly Update – Third Quarter 2002* at 7 (Oct. 22, 2002) (at the end of the third quarter of 2002, AT&T offered broadband telephony to 8 million homes and had achieved an average penetration rate of 16.5 percent, or 1.3 million customers).

[62] *Q2 2002 AT&T Earnings Conference Call – Final*, Financial Disclosure Wire, Transcript 072302au.729 (July 23, 2002) (quoting William Schleyer, president and CEO, AT&T Broadband) ("*AT&T 2Q Earnings*

based competitor to the ILEC. That is a very, very powerful position. . . . We'll be taking a fair amount of share from [the ILECs] over the next few years."[63]

AT&T is not alone: cable telephony has continued to grow rapidly in the first six months of this year, though, as described in Part II below, the recent rise of UNE-P could limit this competition. According to the National Cable & Telecommunications Association, incumbent cable operators added more than 600,000 new subscribers in that six-month period – a 40 percent increase from year-end 2001.[64] *See* Table 5. As cable operators routinely boast, cable telephony has now achieved penetration rates of as high as *40 percent* in the most mature markets, and 20 percent or more in even the less mature ones. *See* Table 6.[65]

Table 5. Cable Telephony Growth in 2002

CLEC	YE 2001	June 2002
AT&T Broadband	1,004,000 customers	1,220,000 customers
Cablevision	13,365 customers	12,650 customers
Charter	16,000	17,600 customers
Cox	453,572 customers	578,231 customers
Comcast	41,500	n/a
Insight	7,500	17,600 customers
Knology Broadband	57,501 connections	69,495 connections
Midcontinent	n/a	3,283 subscribers
RCN	220,562 connections	246,427 connections
Total (NCTA)	**1.5 million subscribers**	**2.1 million subscribers**

Sources: *See* Appendix B.

Conference Call"); *see also* AT&T News Release, *AT&T Broadband-Comcast Merger Will Create More Competitive Marketplace* (Apr. 23, 2002) (Michael Armstrong recently testified before Congress that AT&T had gained a telephony market share of more than 25 percent in 55 communities in which it offered cable telephone service).

[63] Reply to Comments and Petitions to Deny Applications for Consent to Transfer Control, Appendix 3 at 10, *Applications for Consent to the Transfer of Control of Licenses Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-70 (FCC filed May 21, 2002) (quote of Bill Schleyer, AT&T Broadband).

[64] *See* NCTA, *Residential Cable Telephony Subscribers*, http://www.ncta.com/industry_overview/indStats.cfm?statID=13. Data reported by individual companies yields a total of closer to 400,000 cable telephony adds in the first half of 2002.

[65] *See also UNE Fact Report 2002* at II-11 – II-12 & n.38.

Table 6. Cable Telephony Penetration Rates	
AT&T	**July 2001:** "Some [Chicago] suburbs have ***40 percent*** penetration."
	April 2002: "AT&T Broadband has already gained ***25 percent or higher*** cable telephony penetration in 55 communities."
	July 2002: "We now have 115 franchise areas with ***greater than 25 percent*** penetration including dozens of communities within our largest markets. Namely, New England, Chicago, and Pittsburgh. Many of these franchise areas have in fact ***surpassed 30 percent*** penetration."
Cox	**December 2001:** "In Orange County . . . marketwide penetration is ***greater than 25 percent***."
	April 2002: "Across the company's phone markets, ***18 percent*** of the homes to which the company has marketed the service subscribe to it. In some areas where it has been available for two years or longer, the penetration is much higher, up to ***40 percent***."
	October 2002: Cox local residential market share in Orange County and Omaha is "***greater than 30 percent***."
Knology	**June 2002:** ***17 percent*** penetration rate for on-net telephone service.
RCN	**June 2002:** ***16.3 percent*** penetration rate for on-net voice service.
Sources: *See* Appendix B.	

As the *Fact Report* also discussed, cable telephony is poised to become even more widely available as cable operators begin to deploy voice-over-IP technology, which is cheaper and more efficient than the circuit-switching approach used today.[66] Recent events confirm that cable operators are moving to deploy IP cable telephony quickly, and that commercial versions of the service will soon be available.[67] Each of the major cable operators has affirmed its commitment to IP cable telephony; several will soon be deploying the service commercially.[68]

[66] *See UNE Fact Report 2002* at II-15, II-30 – II-32; *see also* C. Kuhl, *Cable Starts Dialing for Dollars with VoIP*, CED (May 2002) ("It's inconceivable that . . . cable wouldn't go to VoIP," which "could be the silver bullet aimed right at the heart of the baby Bells" and "could eventually make copper loops valueless.").

[67] *See*, *e.g.*, M. Stump, *IP Railroad Delivers New Service Set*, Multichannel News (May 6, 2002) ("Top engineers at some of cable's largest MSOs are now implementing strategies to deliver Internet protocol telephony," and these cable operators "are all eyeing or in the advanced stages of testing Data Over Cable Service Interface Specification 1.1-qualified gear allowing for tiered data services and IP telephony to residents and businesses").

[68] *See*, *e.g.*, C. Michael Armstrong, Chairman and CEO, AT&T, *Competition and Mergers in the TV Cable Industry*, statement before the Senate Judiciary Committee, Washington, D.C. (Apr. 23, 2002) (AT&T is "committed to the continued development of IP telephony"); *Comcast to Dial Up IP in Philly*, CED (Aug. 1, 2002) (Comcast is "moving on plans to offer residential primary-line IP telephony service to customers in its home town of Philadelphia;" it has "completed a variety of technical lab trials" and has concluded that "the technology is mature enough to begin field testing and, eventually, commercial deployment."); K. Brown, *Comcast Rings in VoIP in Phila.*, Multichannel News (July 1, 2002) (Comcast expects to be offering a commercial version of the service in Philadelphia by second quarter 2003); S. Sanders, *Supporting the Triple Threat*, America's Network (June 1, 2002); Cox Press Release, *Cox Communications Surpasses Half Million Customers for Residential Digital Telephone Service* (Apr. 16, 2002); C. Kuhl, *Cable Starts Dialing for Dollars with VoIP*, CED (May 2002) (Cox is "looking at 17 systems for VoIP service in 2002."); M. Stump, *IP Railroad Delivers New Service Set*, Multichannel News (May 6, 2002) (Time Warner "has tested VoIP in Portland, Me., and Rochester, N.Y. . . . TWC's goal is to launch IP telephony service by year's end."); Charter Communications, Form 10-Q (SEC filed Aug. 6, 2002) (Charter already had 17,600 VoIP telephony customers as of June 30, 2002); J. Baumgartner, *Putting VoIP to the Crash-Test*, CED (May 1, 2002) (Charter plans "to expand its IP telephony rollouts by next year and into 2004").

Other CLECs concede the reality of cable telephony, but argue that they themselves can't duplicate it.[69] Competition does not, however, require every player in a market to be able to duplicate every facility. And, in any event, a number of carriers – including RCN, Knology, and WideOpenWest – have deployed overbuild networks to provide residential telephony, high-speed Internet access, and video services. These carriers now serve at least 318,000 subscribers and offer service to at least 1.9 million homes.[70]

Other carriers – such as Cavalier and Broadview – are serving residential customers using unbundled loops and their own switches.[71] Cavalier typically deploys switches to serve business customers, and then moves residential customers on to those same switches as well.[72] Cavalier announced in July 2002 that it had "achieved a financial milestone" by posting positive monthly earnings, that its reliance on its own facilities "gives us advantages in the marketplace," and that "we are beginning to reach economies of scale, which combined with our low cost structure, improve profitability."[73] As the *Fact Report* demonstrated, there also are a number of non-BOC ILECs that have begun providing competitive services by "edging out" their incumbent networks into adjacent territories.[74]

Finally, and again contrary to AT&T's claims, facilities-based residential competition is occurring in many states that still have relatively low levels of residential UNE-P. For example, four of the five states with the highest levels of facilities-based residential competition – Rhode Island, Massachusetts, Virginia, and New Hampshire – have very low levels of residential UNE-P. *See* Figure 1. Facilities-based residential competition developed in several states well before UNE-P took off in those states. AT&T, for example, has recently introduced UNE-P service in California and will soon begin service in Massachusetts[75] – both of which already have

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[69] *See*, *e.g.*, AT&T Reply Comments at 26; Z-Tel Reply Comments at 33, 42; CTC Communications Reply Comments at 11.

[70] *See* Knology, Inc. Press Release, *Knology Reports Growth in Connections, Revenue & EBITDA* (Aug. 12, 2002) (Knology Broadband on-net telephone connections and marketable homes passed); *see also* RCN Corp. Press Release, *RCN Announces Second Quarter 2002 Results* (Aug. 7, 2002) (connections: voice and marketable homes); D. Hayes, *Are Overbuilders Keeping Pace?*, CED (Apr. 2002); A. Bryer, *Wide Open West Finds It's Tough to Beat the Incumbent,* Denver Bus. J. (Apr. 5, 2002).

[71] *See* Comments of Cavalier Telephone at 1-2, *Application by Verizon New Jersey, Inc., et al., for Authorization to Provide In-Region, InterLATA Services in New Jersey*, CC Docket No. 01-347 (FCC filed Jan. 14, 2002) (Cavalier provides service by "purchasing unbundled loops ('UNE-L') from Verizon and connecting those loops to Cavalier's own network and switches."); Letter from Rebecca H. Sommi, Broadview, to William Caton, Acting Secretary, FCC, CC Docket No. 01-347 (Mar. 13, 2002) (Broadview provides service by "purchasing unbundled loops ('UNE-L') from Verizon and connecting those loops to Broadview's own network and switches.").

[72] *See*, *e.g.*, *Cavalier Telephone Pays $29M for Conectiv Carrier*, Philadelphia Bus. J. at 5 (June 15, 2001) ("Cavalier targets business and residential customers, the latter composing 60 percent of its customer base. It generally markets residential services to employees of the various businesses it serves").

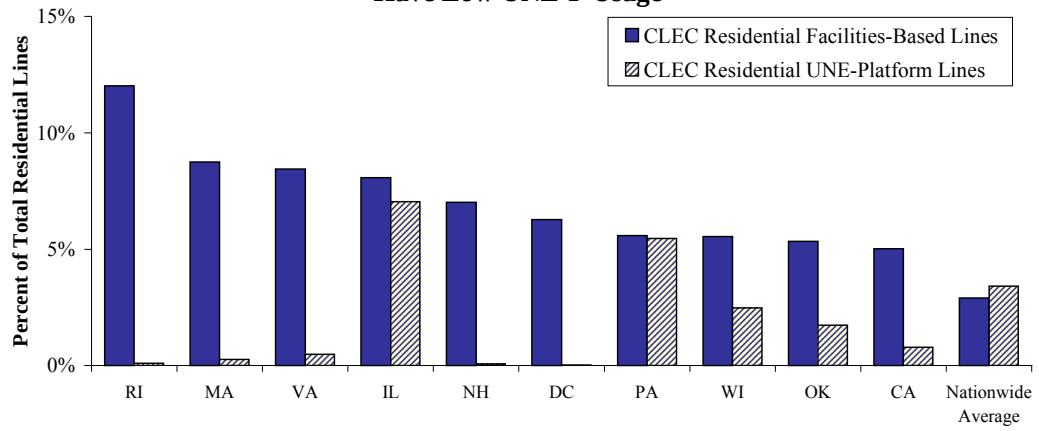
[73] Cavalier Press Release, *Cavalier Telephone Expands Capacity* (July 9, 2002); Cavalier Press Release, *Cavalier Telephone Revenues Soar, Operational Earnings Turn Positive; Monthly Revenues Exceeds $16M* (July 11, 2002).

[74] *UNE Fact Report 2002* at IV-15 & IV-16 at Table 4.

[75] *See* AT&T News Release, *AT&T Enters California Residential Local Phone Market* (Aug. 6, 2002); David Dorman, President, AT&T, presentation at the Goldman Sachs Communacopia Conference at 9, New York, NY (Oct. 2, 2002).

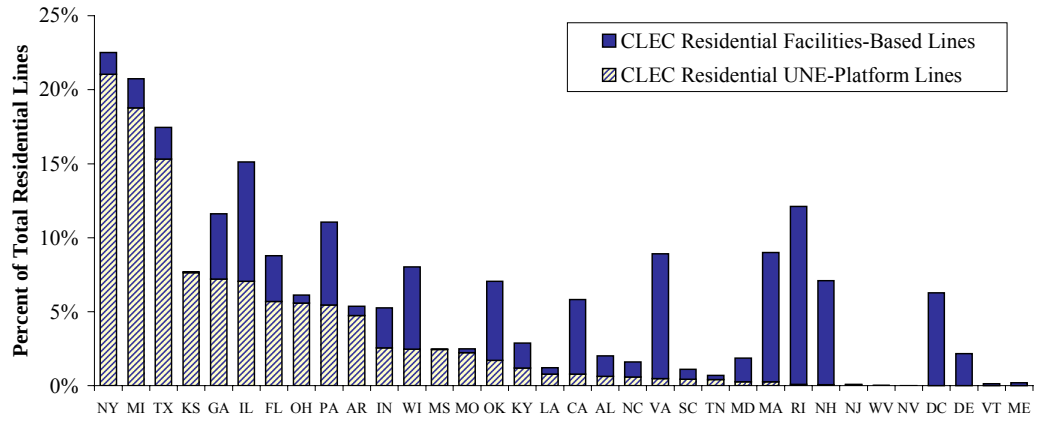
significant levels of facilities-based residential competition. *See* Figure 1. The four states with the highest levels of residential UNE-P – New York, Michigan, Texas, and Kansas – have very low levels of facilities-based residential competition. *See* Figure 2.

Figure 1. Most States with High Levels of Facilities-Based Residential Competition Have Low UNE-P Usage



Excludes Qwest states, the former GTE service area, and Connecticut.

Figure 2. Most States with Significant Residential UNE-P Have Low Levels of Facilities-Based Residential Competition



Excludes Qwest states, the former GTE service area, and Connecticut.

C. Other Forms of Intermodal Competition Are Extensive and Growing Rapidly.

As with cable telephony, no CLEC seriously challenges the *Fact Report*'s data concerning other forms of intermodal competition. For the most part, the CLECs that do address such competition simply argue that the Commission is legally required to ignore it.[76] AT&T

[76] *See*, *e.g.*, AT&T Reply Comments at 25 (arguing that evidence of intermodal competition does not have "any pertinence to this proceeding."); Allegiance Reply Comments at 33-35 (arguing that evidence about intermodal

dismisses all forms of intermodal competition as "insignificant."[77] Wireless is not a "viable alternative," it "is simply not a remotely adequate substitute for wireline."[78] And data networks "are used to complement existing circuit switch networks, not to replace them."[79]

But a recent AT&T presentation to investors says that one of the "key issues that the RBOCs face" is "how to compete against the ~137 million wireless lines."[80] AT&T's recent 10-K informs investors that usage of AT&T's own wireline network "is declining as a result of substitution of wireless services," and that AT&T is "facing competition from non-traditional sources, including as a result of technological substitutions, such as Internet telephony, high speed cable Internet service, e-mail and wireless services."[81] Elsewhere, AT&T is telling investors that "[i]nexorably, cable and wireless are going to eat into [the ILECs'] share [of the local market]."[82] As shown in Table 7, independent analysts continue to reach similar conclusions.

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competition "carry no weight in an impairment analysis"); WorldCom Reply Comments at 149 (making legal arguments for excluding consideration of intermodal competition).

[77] AT&T Reply Comments at 357-359.

[78] AT&T Reply Comments at 160, 25.

[79] AT&T Reply Comments at 358.

[80] AT&T, *AT&T UNE Overview* at 37 (Sept. 17, 2002) ("*AT&T UNE Overview*").

[81] AT&T Corp., Form 10-K (SEC filed Apr. 1, 2002).

[82] S. Woolley, *Bad Connection*, Forbes (Aug. 12, 2002) (quoting AT&T president David Dorman); *see also AT&T UNE Overview* at 37 (noting that a "key issue[] that the RBOCs face" is "how to improve their efficiency so they can compete effectively with complete facilities-based carriers (*e.g.*, CATV) for telephony and DSL.").

Table 7. Independent Analysts Confirm that ILECs Face Significant Intermodal Competition
Eastern Management Group (4/02): "The increasing trend toward the abandonment of landline connections seems to be a natural outgrowth of the advances in technology, lower pricing and more aggressive marketing" by wireless companies.
Merrill Lynch (4/02; 5/02): "[W]e believe that Broadband, Cable Telephony, Wireless, and VoIP are accelerating the migration of voice traffic from traditional fixed line networks towards more competitive although often less profitable networks." "[W]ith changes in wireless pricing-more bucket plans with huge (or unlimited) bundles of night and weekend minutes, including long distance-there is growing evidence that wireless is starting to have more and more of an impact on the wireline telecom service providers."
Morgan Stanley (7/02): "We [] expect continued weakness in access lines, as substitution to wireless, cable telephony, and broadband remains an issue."
Salomon Smith Barney (6/02): "[G]iven the secular decline stemming from competition, price declines and technology shifts towards wireless, email, instant messaging, cable modems and over time from cable telephony, we predict the wireline telecom fundamentals will not return to the strength we saw in the past decade, when many of the companies loaded up on debt."
Schwab Capital Markets (4/02): "[T]echnology is forcing the migration to new service models. Telephone carriers face competitive pressure from wireless substitution, IP telephony and instant messaging."
Telecompetition Inc. (5/02): "[I]n the next five years, mobile and cable telephony service providers will steal 30 million access lines and bill 40% more minutes than wireline carriers."
Sources: *See* Appendix B.

As to wireless services in particular, WorldCom asserts that the *Fact Report* did "not even attempt to show" that wireless substitutes with wireline service;[83] Allegiance insists that the Report "avoid[s] any mention of the technical disadvantages that limit wireless substitutability."[84] The authors of these comments apparently disagree with the *Fact Report* so strongly that they did not bother to read it.

The *Fact Report* cited independent studies indicating that at least 10 million ILEC lines had been displaced entirely by wireless as of year-end 2001.[85] Many wireless carriers are now marketing their services as direct substitutes for wireline service.[86] The quality of digital wireless service is now comparable to wireline's, and in some respects (*e.g.*, operator services) superior.[87] The rate of busy circuits and dropped calls on wireless networks continues to improve rapidly.[88] Price differences, which used to be cited as the principal reason for not treating wireless and wireline as substitutes,[89] have all but disappeared;[90] wireless is now clearly

[83] WorldCom Reply Comments at 153.

[84] Allegiance Reply Comments at 34.

[85] *See UNE Fact Report 2002* at IV-12; S. Ellison, IDC, *Wireless Displacement of Wireline Forecast and Analysis, 2001 – 2005* at Figures 9 & 10 (Dec. 2001).

[86] *See UNE Fact Report 2002* at IV-13.

[87] *See id.* at IV-13 – IV-14.

[88] *See id.* at IV-14.

[89] *See*, *e.g.*, *Implementation of the Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Second Annual Report at 54, 12 FCC Rcd 11266 (1997) ("[T]he primary obstacle to classifying wireless as a potential substitute for wireline telephony is the per minute charge.").

price competitive with wireline for many users, when one takes into account enhanced features and the value of mobility.[91]

The *Fact Report*'s findings have been confirmed by more recent analyses. A study by wireless provider Leap Wireless "indicated that 32% of its subscriber base has completely cut their home phones, up from approximately 7% about a year-and-a-half ago."[92] Another by Merrill Lynch found that "the percentage of wireless subscribers that have completely cut their home phones could be as high as 10% to 15% in some markets."[93] A September 2002 Yankee Group study found that, "although only 3 percent of U.S. consumers use their mobiles as their only phone . . . 26 percent of the mobile users' minutes are already being displaced from wireline to wireless and 45 percent of mobile users indicated at least some substitution."[94] By 2006, the study predicts, U.S. mobile subscribers will increase by 50 percent and will "dominate personal calling and severely cannibalize landline minutes of use."[95]

ILECs are also losing millions of second lines to cable modem networks, on top of the millions of primary lines they are losing to cable telephony. As of year-end 2001, approximately 70 percent of all residential broadband lines were provided by cable networks, and two out of three new broadband subscribers choose cable modem service.[96] As the *Fact Report* also explained, a great deal of additional traffic is being displaced by data services that don't show up in standard counts of lines served. For example, on the most conservative assumptions, e-mail and instant messaging produce traffic volumes equal to one-third of all voice traffic on ILEC

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[90] *See UNE Fact Report 2002* at IV-14. The most recent surveys buttress prior conclusions that wireless service is often cheaper than wireline service for comparable bundles of service. *See*, *e.g.*, S. Romero, *When the Cellphone Is the Home Phone*, N.Y. Times at G1 (Aug. 29, 2002) (showing that wireless bundles that include long distance and Internet access are cheaper than comparable wireline bundles); *Yankee Group Mobile Market Report* at 7 ("[W]ireless carriers are exploiting their low marginal costs to offer cheap calling in direct competition to wireline services."); *Wireless Use to Nearly Double by 2006 – Study*, Reuters (Sept. 16, 2002) (A recent study found that wireless is "perceived by many to be cheaper, more indispensable, more permanent, and more accessible" than wireline phones).

[91] AT&T argues that wireless should not be viewed as substituitable with wireline because wireless "require[s] the user to pay for incoming as well as outgoing calls." AT&T Reply Comments at 359. That concern is largely a thing of the past. AT&T itself recently began offering a wireless calling plan that offers unlimited domestic calls. *See* B. Charny, *AT&T Plan Ends Limits for Cell Calls*, CNET News.com (Sept. 5, 2002), http://news.com.com/2100-1033-956775.html?tag=fd_top. *See also* L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution Becoming More Meaningful – Industry Report at *2 (Apr. 22, 2002) ("[W]ith changes in wireless pricing-more bucket plans with huge (or unlimited) bundles of night and weekend minutes, including long distance-there is growing evidence that wireless is starting to have more and more of an impact on the wireline telecom service providers.").

[92] *Id.* at *3; *see also* Leap Wireless Press Release, *Leaping over Landline: Leap Leads Wireline Displacement Trend* (June 24, 2002) (according to a company survey, "more than 26 percent of [] Cricket customers say they do not have a traditional phone at home.").

[93] L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *2 (Apr. 22, 2002).

[94] *Wireless Use to Nearly Double by 2006 – Study*, Reuters (Sept. 16, 2002) (quoting Yankee Group study).

[95] Yankee Group News Release, *Consumers Abandon Landlines and Increase Mobile Call Volumes, Creating Strong Growth in the Wireless Market, Reports Yankee Group* (Sept. 16, 2002).

[96] *See UNE Fact Report 2002* at IV-18 – IV-21.

networks; text messages can and do substitute for voice calls, and a large and growing fraction of this data traffic originates and/or terminates on competitive networks.[97] And again, the most recent data confirm what the *Fact Report* described. The number of instant messaging users increased by more than 12 percent in the first quarter of 2002 alone.[98] IDC predicts that 40 million business users and 196.2 million home users worldwide will use IM in 2002, versus 18 million business users and 164 million home users in 2001, representing growth rates of 122 percent (for business) and 20 percent (for homes).[99] The time that users spend using instant messaging is also increasing rapidly.[100]

D. CLECs Continue To Receive Financing and Build Out Their Networks.

The *Fact Report* demonstrated that CLECs, wireless carriers, and broadband providers have invested enormous amounts of capital in building their own networks and expanding the availability of their services.[101] In early October, the Competitive Telecommunications Association released a report of the New Paradigm Resources Group, which concludes that cable operators, interexchange carriers, and other CLECs have outspent ILECs on new network infrastructure by more than two to one ($103 billion versus $47 billion) since passage of the Telecommunications Act in 1996.[102] As demonstrated above, most of this investment occurred *before* the rise in UNE-P. And, as shown in Part II below, the recent, sharp rise of UNE-P now threatens to devalue the investments already made and deter future investment.

A number of CLECs argue that many in their ranks are in serious financial distress or have gone out of business.[103] But although capital markets are far more discriminating than they once were, it is not the case that capital markets are closed to all CLECs, as some carriers maintain. Rather, CLECs collectively continue to attract capital, build out their networks, and grow their customer bases. ALTS, the CLECs' own trade association, declares "the most

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[97] *See id.* at II-26 – II-28.

[98] M. Meeker, *et al.*, Morgan Stanley, Dean Witter, Investext Rpt. No. 8477344, Internet Portals/Commerce & PC Software – Industry Report at *4 (Apr. 15, 2002) (growth rate for the top four IM applications).

[99] C. Swett, *Instant Message Mania*, Sacramento Bee (May 30, 2002).

[100] *See*, *e.g.*, *Did You Know?*, San Antonio Express-News (July 28, 2002) ("The number of people instant messaging at work increased 26 percent from October to April to 16.9 million. Time spent instant messaging also increased to 7.2 billion minutes in April, up 74 percent.").

[101] *See UNE Fact Report 2002* at I-10 – I-12.

[102] New Paradigm Resources Group, Inc., *Measuring the Economic Impact of the Telecommunications Act of 1996: Telecommunications Capital Expenditures (1996-2001)* at Table 21, prepared for CompTel (Oct. 2002).

[103] *See*, *e.g.*, AT&T Reply Comments at 16, 28, 43, 259-260, 277, 313-314, 351-352; WorldCom Reply Comments at 136, 144; Allegiance Reply Comments at 44-45, 49; Z-Tel Reply Comments at 19-20; XO Reply Comments at 25-26; Sprint Reply Comments at 35; MPower Reply Comments at 12; Talk America Reply Comments at 29; El Paso Networks/CTC Reply Comments at 17-18; Covad Comments at 17-18.

remarkable feature of the CLEC industry in 2001 was this – it continued to grow!"[104] "CLECs have shown tremendous resilience and staying power, in spite of the market turmoil."[105]

ALTS has more recently stated that the CLEC industry "is about to turn the corner" as "CLECs are collectively on course to generate positive EBITDA in 2002, probably for the first time in their history."[106] According to ALTS, "now we see solid, well-financed companies [ready] to compete head-to-head with Bell companies."[107] As discussed above, CLECs have continued to attract large numbers of new customers to their facilities in the first two quarters of this year. Between January and June 2002, for example, they added between 1.2 million and 2.4 million additional lines – including 600,000 residential lines. According to ALTS, CLECs also "are continuing to increase their revenues," which one analyst expects to continue to increase "at a compound annual growth rate . . . of 15%" over the next five years.[108]

CLECs have continued to receive funding as well. According to ALTS, "CLECs have collectively acquired over $1 billion in additional funding in the last nine months."[109] In this calendar year, Level 3 raised $500 million in a bond offering;[110] New Edge Networks received $15 million in cash and converted $131 million in debt;[111] DSL.net raised $35 million;[112] IP Communications secured commitments for $30 million;[113] Broadview Networks received $40 million;[114] Choice One received $49 million in new debt financing;[115] Williams secured $150 million;[116] Yipes secured $54 million;[117] Integra Telecom raised $22 million;[118] Eschelon received $35 million;[119] and Xspedius raised $5 million.[120]

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[104] ALTS, *The State of Local Competition 2002* at 5 (Apr. 2002) (open letter from ALTS president John Windhausen, Jr.) ("*ALTS 2002 Annual Report*").

[105] *ALTS 2002 Annual Report* at 6 (open letter from ALTS president John Windhausen, Jr.).

[106] ALTS, *Progress Report on the CLEC Industry* at i, 5 (Oct. 17, 2002) ("*ALTS 2002 Progress Report*").

[107] *CLEC Industry Will Revive in 2003, Report Says*, Communications Daily at 4 (Oct. 18, 2002).

[108] *ALTS 2002 Progress Report* at 5.

[109] *Id.* at i.

[110] *Buffett Bets on Telecom*, CNNMoney.com (July 8, 2002), http://money.cnn.com/2002/07/08/news/companies/level3/.

[111] New Edge Networks Press Release, *New Edge Networks Adds $146 Million to its Equity Base* (May 8, 2002).

[112] DSL.net Press Release, *DSL.net Closes Final Installment of $15 Million Equity Investment; $35 Million in Total New Financing Now Secured* (June 3, 2002).

[113] IP Communications News Release, *IP Communications Completes Third-Round Financing with Additional $30 Million in Funding Commitment* (Apr. 18, 2002).

[114] Broadview Networks Press Release, *Broadview Networks Completes New Round of Equity Financing* (June 10, 2002).

[115] Choice One Press Release, *Choice One Receives Commitment for $49 Million in New Debt Financing* (Aug. 14, 2002).

[116] Williams Communications Press Release, *Williams Communications Group Secures $150 Million Investment from Leucadia National* (July 26, 2002).

CLECs have also continued to build out their networks. For example, Cavalier announced in July that it had "expanded our switching network from 4 to 8 switches, added thousands of fiber route miles, tripled our Internet backbone capacity and doubled our long distance network."[121] In June, Speakeasy announced that it would use recent funding "to accelerate expansion into the small and medium business market, and further build-out of the company's network into regional and urban markets."[122] ATX announced in July that it purchased an operations and control center in Philadelphia.[123] In August, IDT announced that it "will continue to add to our network infrastructure."[124] Level 3 added 5,000 fiber miles to its local network in the second quarter of 2002.[125]

Many other CLECs are now emerging from bankruptcy debt-free – among them, in the last 10 months alone, Teligent, Covad, Williams, McLeod, Birch, Mpower, Yipes, Advanced Radio Telecom (now First Avenue Networks), and Comdisco.[126] The assets of many competitors that did exit the market have been quickly acquired by surviving CLECs, at bargain-basement prices.[127] Debt-for-equity swaps orchestrated in reorganization proceedings, asset

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[117] Yipes Press Release, *Yipes Enterprise Services Emerges as Newly Funded Company Poised for Growth* (July 9, 2002)

[118] Integra Press Release, *Integra Telecom Secures $22 Million in Funding* (July 11, 2002).

[119] Eschelon Press Release, *Eschelon Telecom, Inc. Announces Completion of $35 Million in Financing* (July 1, 2002).

[120] PricewaterhouseCoopers, *MoneyTree Investee Companies: Xspedius Holding Corporation*, http://www.pwcmoneytree.com/company.asp?year=2002&qtr=2&key=71851.

[121] Cavalier Press Release, *Cavalier Telephone Expands Capacity* (July 9, 2002) (quoting Larry Sims, Cavalier vice president of operations).

[122] *Speakeasy Raises $6 Million in Second Round*, Puget Sound Bus. J. (June 10, 2002).

[123] ATX Press Release, *ATX/Corecomm Continues Network Expansion with Purchase of State-of-the-Art Operations and Control Center in Philadelphia* (July 10, 2002).

[124] IDT Corp. Press Release, *IDT Telecom Achieves Minutes-of-Use Records in July* (Aug. 13, 2002) (quoting Motti Lichtenstein, CEO, IDT Telecom).

[125] *Compare* Level 3 Press Release, *Level 3 Reports Second Quarter Results* (July 18, 2002) (937,000 local fiber miles to date) *with* Level 3 Press Release, *Level 3 Reports First Quarter Results* (Apr. 23, 2002) (932,000 local fiber miles to date).

[126] *See* Teligent Press Release, *Teligent Completes Its Reorganization - Company Exits Bankruptcy Fully Funded and Debt Free* (Sept. 12, 2002); Covad Press Release, *Covad Closes Funding from SBC As It Exits from Bankruptcy and Eliminates $1.4 Billion in Debt* (Dec. 20, 2001); First Avenue Networks Press Release, *Leading Broadband Solutions Provider Emerges from Bankruptcy* (Jan. 10, 2002); Comdisco News Release, *Comdisco Emerges From Chapter 11; Plan of Reorganization Becomes Effective* (Aug. 13, 2002); Williams Communications Press Release, *Williams Communications Completes Restructuring, Exits Chapter 11* (Oct. 16, 2002); McLeodUSA Press Release, *McLeod Announces Completion of Financial Restructuring, Emergence from Chapter 11* (Apr. 17, 2002); Birch Press Release, *Birch Telecom Emerges From Bankruptcy* (Sept. 30, 2002); Mpower Press Release, *Mpower Emerges from Chapter 11 with 90% Less Debt* (July 30, 2002); Yipes Press Release, *Yipes Enterprise Services Emerges as a Newly Funded Company Poised for Growth* (July 9, 2002).

[127] *See*, *e.g.*, AT&T News Release, *AT&T Completes Acquisition of NorthPoint Communications* (May 25, 2001); *AT&T 2Q Earnings Conference Call* (David Dorman, president and director, AT&T: "We [] continue to examine the bankrupt assets as a substitute for new capital equipment deployment. The bone pile continues to grow."); *'Bone Pile' of Distressed Assets Has AT&T Hunting for Bargains*, Telecommunications Reports at 25 (Apr. 29, 2002) (AT&T has "recently acquired central office facilities in Denver, saving substantial time-to-market and

transfers, and broader consolidation and restructuring in the CLEC sector create stronger competitors with more extensive networks and larger customer bases.[128] As AT&T's president observes, "[i]ndustry turmoil is clearly heightening AT&T's prospects in a flight to quality . . . AT&T has seen increased customer interest in service alternatives and has already experienced some wins."[129] Indeed, analysts worry that some competitors might emerge from bankruptcy with an unfair advantage over their competitors, including the ability to lower their prices to levels that debt-laden companies can't match.[130]

II. UNE-P Impedes Facilities-Based Competition.

The extensive evidence in the *Fact Report* establishes that CLEC *facilities* account for most of the local competition that has emerged to date.[131] AT&T and WorldCom aside, the largest switch-based CLECs use UNE-P in limited amounts, or not at all.[132] At the other pole, the two main users of the UNE-P, AT&T and WorldCom, have made no serious effort to migrate their UNE-P customers to their own facilities, not even in markets where AT&T and WorldCom have already deployed large numbers of switches.[133] A companion report – *UNE-P and Investment* – established that UNE-P penetration is negatively correlated with competitive investment: more UNE-P in a state means less facilities-based competition.[134]

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millions of capital dollars."); WorldCom Press Release, *WorldCom Closes Rhythms Transaction* (Dec. 5, 2001) (WorldCom acquired assets of bankrupt Rhythms); SureWest News Release, *SureWest Communications Acquires WINfirst Assets* (July 15, 2002) (noting that SureWest purchased the assets of bankrupt Western Integrated Networks, which "accelerates SureWest Broadband's residential-market expansion into Sacramento"); ATX Press Release, *ATX Expands Facilities-Based Network with New Switch Center in Northern Virginia* (June 14, 2002); ATX Press Release, *ATX/Corecomm Continues Network Expansion with Purchase of State-of-the-Art Operations and Control Center in Philadelphia* (July 10, 2002) (noting that acquisition of operations center in Philadelphia was "the second example in the past month of our ability to capitalize on the challenges our industry has met by securing attractive yet distressed facilities at substantial cost savings.").

[128] *See*, *e.g.*, Cavalier Press Release, *Cavalier Telephone Expands Capacity* (July 9, 2002); Cavalier Press Release, *Cavalier Telephone Revenues Soar, Operational Earning Turn Positive; Monthly Revenues Exceeds $16M*, (July 11, 2002) (Cavalier's president states that "[Cavalier has] been the beneficiary of the shakeout in the telephone industry," and that the "negative economic climate has proven to be a windfall for Cavalier," because "many of the customers whose previous carriers failed have chosen Cavalier."); Cavalier Press Release, *Cavalier Telephone Expands Capacity* (July 9, 2002) ("The sudden downfall of WorldCom and other telecommunications companies has placed a significant rush on the facilities of Cavalier," and that "it has doubled its switching and network capacity throughout its footprint to accommodate widespread requests by current and new customers.").

[129] *AT&T 2Q Earnings Conference Call* (quoting David Dorman, President, AT&T).

[130] *See*, *e.g.*, *Experts See Wi-Fi and 3G Data Markets Coexisting*, Communications Daily (Oct. 17, 2002) (Terence Matthews, Chairman, Mitel Networks: "WorldCom emerging from bankruptcy as entity without debt would be 'serious cat among the pigeons'"); *id.* (Roger McNamee, Integrated Capital Partners: "Industry could face multiple cycles of bankruptcies as service providers emerged from bankruptcy with substantially less debt and engage in aggressive price war"); WorldCom Comments at 23 ("firms that are able to emerge from bankruptcy will be better able to compete, having been relieved of their heavy debt burdens.").

[131] *See UNE Fact Report 2002* at I-2.

[132] *See id.* at II-1 – II-2 & Figure 2.

[133] *See id.* at II-17 – II-18.

[134] *See UNE-P and Investment* at 2-11.

UNE-P Will Undermine Both Incumbents and Facilities-Based Competitors. The impact of UNE-P on investment is now growing much worse. Under intense pressure from AT&T and WorldCom, a number of states have radically lowered their UNE-P rates, and this has sharply accelerated UNE-P growth rates. Since the beginning of 2002, UNE-P rates have been slashed by more than 40 percent in New Jersey; more than 30 percent in California; more than 20 percent in Colorado, Idaho, Iowa, and Maine; and between 16 and 18 percent in Kentucky, Montana, North Dakota, Washington, and Rhode Island.[135] Most of the investment in facilities-based competition heretofore occurred where or when CLECs were not using the UNE-P to any significant extent. The recent, sharp declines in UNE-P rates are certain to have significant adverse impacts on new investment in competitive facilities.

As investment analysts have uniformly recognized, the new, sharply lower UNE prices will not allow Bell companies to recoup their costs. "[R]egulators are forcing the RBOCs to wholesale their network at rates that are significantly below the costs that the financial community looks at."[136] Analysts estimate that Bell companies lose 50 to 60 percent of the revenues when they convert a line to UNE-P, but retain 90 percent or more of the costs.[137] As Scott Cleland of the Precursor Group puts it, UNE-P regulators are putting the industry on a "cotton candy diet." The cut-rate price of UNE-P "is so sweet upfront." But "we can't live on cotton candy."[138]

AT&T and WorldCom argue that what the Bell companies lose in local service they will earn back in long distance.[139] But long-distance prices are deregulated, and prices are

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[135] *See* A. Quinton, *et al.*, Merrill Lynch, *The Telecommunicator: Telecom Act Seven Years On* (In-depth Report) at 19 (Sept. 23, 2002) ("*Merrill Lynch Telecommunicator Report*").

[136] A. Kovacs, *et al.*, Commerce Capital Markets, Inc., *The Status of 271 and UNE-Platform in the Regional Bells' Territories* at 15 (May 1, 2002).

[137] *See*, *e.g.*, M. Crossman, *et al.*, J.P. Morgan Securities Inc., *Industry Update – No Growth Expected for Bells in 2003* at 15 (July 12, 2002) ("While the Bells lose roughly 60% of the revenues when they lose a line to a UNE-P based competitor, we estimate that they retain 95% of the costs."); J.B. Grubman, *et al.*, Salomon Smith Barney, Investext Rpt. No. 8593838, AT&T Corp. – Company Report at *7 (June 14, 2002) ("Obviously from an RBOC perspective, UNE-P is a nightmare since they only end up with half the revenue but at the same amount of cost."); A. Kovacs, *et al.*, Commerce Capital Markets, Inc., *The Status of 271 and UNE-Platform in the Regional Bells' Territories* at 15 (May 1, 2002) ("[F]or all RBOCs, UNEs are priced below cash operating cost, and radically below total operating cost including depreciation and amortization. The discounts from total cost are 50%-60% below total cost even when total cost does not include cost of equity, a component that is allowed under TELRIC."); A. Quinton, *et al.*, Merrill Lynch, *The Telecommunicator: Telecom Act Seven Years On* (Comment) at 4 (Sept. 23, 2002) ("[U]nder the UNE pricing scheme . . . the RBOC will generate negative free cash flow [per line] in 47 of their states") ("*Merrill Lynch Telecommunicator Comment*"); F.G. Louthan, IV, Raymond James & Associates, *UNE-P: Unlocking the Impact to the RBOCs* at 5 (Oct. 21, 2002) ("*Raymond James UNE-P Analysis*") ("the majority of the costs associated with the local telecom business are fixed in nature . . . When the RBOCs lose lines to UNE-P competitors, they are required to maintain the network in its entirety, making it difficult if not impossible to cut out costs related to an equal percentage of lost lines.").

[138] *Seidenberg Blames Regulators for Telecom's Economic Slump*, Communications Daily at 12 (Sept. 20, 2002).

[139] AT&T Press Release, *AT&T Releases Study Showing Bells Profit from Telecom Act* (Sept. 18, 2002) ("Our analysis indicates that the Bells make more money entering the residential long distance market than they lose when competitors enter the local market using facilities leased from Bell companies"); Letter from Donna Sorgi, WorldCom, to Michael Powell, Chairman, FCC, at 4, *attached to* Ex Parte Letter from Ruth Milkman, on behalf of WorldCom, to Marlene Dortch, FCC, CC Docket Nos. 01-338, 96-98, and 98-147 (Sept. 16, 2002) ("[I]t is clear that

competitive. It is absurd to argue that any company can offset losses imposed by wholesale price regulation with gains by entering a different, competitive market. Analysts agree that it can't happen. UBS Warburg, for example, estimates that, to break even on EBITDA, "the Bells need to add 5.4 long distance customers for each UNE-P line added."[140] A study by some former WorldCom employees that now do business as Network Conceptions[141] finds that "[t]he report by UBS Warburg was highly detailed and based on underlying retail and UNE pricing data that appears to be very accurate."[142] Even WorldCom's flawed attempt to refute the Warburg analysis shows that Bell Companies won't break even on a 1-for-1 exchange of UNE-P customers for long-distance customers.[143] And in any event, the purpose of the 1996 Act isn't to shuffle around the effective ownership and operation of existing local and long-distance networks, it is to create an environment for sustainable facilities-based competition in both sectors.[144]

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the loss of customers (and revenues) to UNE-P-based competitors is more than offset by the gain of long distance customers (and revenues)").

[140] J. Hodulik, *et al.*, UBS Warburg, *The Regional Bells: How Much Pain from UNE-P?* at 9 (Aug. 2002) ("*UBS Warburg Presentation*"). Z-Tel has recently attacked UBS Warburg's conclusions, but Z-Tel's own analysis is hopelessly flawed. Z-Tel compares the revenues that ILECs earn from UNE-P with the supposed "operational costs" that ILECs report under ARMIS. *See* Ex Parte Letter from R. Curtis & T. Koutsky, Z-Tel, to Chairman Powell *et al.*, CC Docket No. 01-338 at 3 & n.5 (Sept. 23, 2002) ("*Z-Tel Ex Parte*"); G. Ford & T. R. Beard, *What Determines Wholesale Prices for Network Elements in Telephony? An Econometric Evaluation*, Phoenix Center Policy Paper at 21-22 (Sept. 2002) ("*Z-Tel Study*"). Z-Tel computes "operational costs" by taking the operational expenses that ILECs report under Line 720 of ARMIS, subtracting depreciation and amortization expenses (Line 6560), diving by total access lines, and then subtracting per-line marketing and customer service costs (Lines 6610, 6620) and per-line access expenses (Line 6540). *Z-Tel Study* at 21. But Z-Tel inexplicably excludes many other costs that ILECs incur in the real world and report under ARMIS. For example, Z-Tel excludes depreciation expenses (Lines 656X), even though it acknowledges that this single item amounts to between one-third and one-half of an ILEC's actual costs. *See Z-Tel Ex Parte* at 4. Z-Tel also excludes other significant capital-related costs that ILECs report under ARMIS – including federal and state taxes (Account 72XX), property taxes (Lines 74XX), and cost of capital (Lines 75XX) – as well as other operating expenses such as uncollectibles (Lines 53XX) and regulatory expenses (*e.g.*, Line 7910). All of these costs would be included in even a TELRIC cost study, so it defies reason to exclude these costs from an analysis that, like Z-Tel's, purports to analyze actual costs. Finally, Z-Tel also understates costs by subtracting all retail marketing and customer care costs, even though only some of these expenses are avoided when a retail customer is lost to UNE-P.

[141] Network Conceptions, *About Us*, http://www.netconllc.com/aboutus.htm.

[142] Network Conceptions, *Access to the Network [UNE-P]: Catalyst for Massive Change in Local Telecom?*, Executive Intelligence Briefing, at 3 (Sept. 2002); *see* AT&T Press Release, *AT&T Releases Study Showing Bells Profit from Telecom Act* (Sept. 18, 2002).

[143] *See* Ex Parte Letter from Ruth Milkman, on behalf of WorldCom, to Marlene Dortch, FCC, CC Docket Nos. 01-338, 96-98, and 98-147, Attachment B at 5 (Sept. 16, 2002).

[144] *See*, *e.g.*, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Notice of Proposed Rulemaking, Separate Statement of Commissioner Kevin J. Martin, CC Docket Nos. 01-338, 96-98, and 98-147, FCC 01-361 (rel. Dec. 20, 2001) ("The goal of the Telecommunications Act of 1996 was to establish an environment that promotes meaningful competition and allows for deregulation. To get to true deregulation, we need facilities-based competition."); B. Roberts, *et al.*, Dresdner Kleinwort Wasserstein, *UNe-P: The Unprofitable RBOC* at 2 (Aug. 9, 2002) ("The goal of the 1996 Act was to create the environment for local competition, not create local competition").

Forcing the owners of the legacy network to sell it off at sharply depressed prices harms all other facilities-based competitors, too.[145] Credit Suisse First Boston recently "turned pessimistic about the extent to which Cox . . . will generate money from offering local telephone service over its cable TV systems" due to "the long distance carriers' use of UNE-P [that] has picked up speed of late."[146] Commenting on WorldCom's plan to expand its UNE-P offerings, Legg Mason wrote: "the more successful the plan is, the more it will reduce the attractiveness of the telephony opportunity for cable."[147] ILECs would likely have been denounced for predatory pricing if they had cut their own prices to UNE-P levels, and targeted the price cuts, as some state regulators are now doing, at the market segments where facilities-based competition is developing the fastest.

The dramatic reductions in UNE-P prices also further weaken the condition of already crippled equipment manufacturers, which depend on facilities-based investment by carriers. Reductions in UNE prices, taken together with a weak economy and increasing intermodal competition, have forced incumbent LECs to cut capital spending to reduce costs. A recent Merrill Lynch report concludes that, "[g]iven the poor economics of the UNE-P pricing schemes, it is likely that the RBOCs may aggressively begin to cut capex in the local infrastructure to compensate for lost profitability."[148] Consistent with that prediction, SBC has recently announced that it will cut its capital expenditures in 2003 by roughly one-third from 2002, and to less than half of 2001 levels.[149] Nortel and Lucent, two stalwarts of the industry, have both lost more than 98 percent of their stock value since 2000 and have reduced their workforce by 148,000 employees.[150] In the last eleven quarters, Nortel has lost a staggering $33 billion, and Lucent is now planning a reverse split of its battered shares to keep its stock from being

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[145] *See*, *e.g.*, G. Mannes, *Cox's Prospects for Growth May Be Fading*, TheStreet.com (Sept. 19, 2002), http://www.thestreet.com/tech/georgemannes/10043045.html (CSFB Analyst Lara Warner lowered her expectations for the success of Cox's cable telephony efforts based on increased local competition, mainly from CLECs using UNE-P); B. Levin, *et al.*, Legg Mason Wood Walker, *WorldCom/MCI Bundled Phone Offer Challenges Rivals, Regulators* at 4 (Apr. 23, 2002) ("Given how the [Neighborhood] plan affects the attractiveness of telephony to new facilities-based providers, the states may have to shift some of the costs . . . if they want to encourage new facilities-based competitors, such as cable."); *see also UNE Fact Report 2002*, § V.

[146] G. Mannes, *Crowds Wiring Phone-Growth Hopes from Cox*, The Street.com (Sept. 19, 2002), http://www.thestreet.com/tech/georgemannes/10043045.html (citing Credit Suisse First Boston analyst Lara Warner).

[147] B. Levin, *et al.*, Legg Mason Wood Walker, *WorldCom/MCI Bundled Phone Offer Challenges Rivals, Regulators* at 2 (Apr. 23, 2002).

[148] *Merrill Lynch Telecommunicator Comment* at 4; *see also* B. Roberts, *et al.*, Dresdner Kleinwort Wasserstein, *UNe-P: The Unprofitable RBOC* at 5 (Aug. 9, 2002) ("In the longer term [UNE-P] could rob consumers of advanced services that require the RBOCs' plentiful cash flow to fund."); *id.* at 6 ("In the short run, the consumer wins with these artificially lowered local rates. In the long term, the consumer will suffer as ILECs cut the capital budgets by 30%, which will produce fewer services, more network outages, and crummier customer service.").

[149] *See* SBC Press Release, *SBC Provides Update on Long-Distance Entry and UNE-P Line Loss* (Oct. 8, 2002) (SBC "reaffirmed that it expects full-year 2002 capital expenditures of below $8 billion and is targeting capital expenditures of $5 billion in 2003."); SBC Press Release, *SBC Reports Fourth-Quarter Earnings* (Jan. 24, 2002) (SBC targeted 2002 "[f]ull-year capital expenditures of $9.2 billion to $9.7 billion, down from $11.2 billion in 2001.").

[150] B. Feder, *FCC Chief Says Telecom Isn't Doomed by Cutbacks*, N.Y. Times at C-1 (Oct. 21, 2002).

"delisted" by the New York Stock Exchange. Smaller equipment companies have also been forced to lay off tens of thousands of workers, and many have entered bankruptcy. Although it may be true that the UNE-P is not the only cause of this problem, it is greatly exacerbating the situation.

Despite all this, AT&T and other CLECs argue that the recent growth in UNE-P shows that "customers value this type of competitive entry."[151] But this supposed new competition is occurring entirely on the ILEC's legacy network. Like pure resale, it offers no real opportunities for CLECs to improve their margins through innovation or increased efficiency. It merely rewards success in the regulatory arena, not in the marketplace. Moreover, this supposed competition is occurring only because it invites CLECs to play one rate-regulatory structure off against another. CLECs are selling UNE-P to high-margin customers, in areas where UNE-P rates have been pushed far below regulated retail rates. CLECs are not selling UNE-P to low-margin customers, in areas where retail rates remain below UNE-P rates. Retail rates are kept high in some areas to subsidize below-cost rates in other areas; the three-zone UNE-P rates tend to be higher where retail rates are artificially low, and lower where retail rates are artificially high. The upshot, as one analyst notes, is "fraudulent competition," competition "based on pure regulatory arbitrage"[152] – or, as the D.C. Circuit has put it, "synthetic competition."[153] It is based on wholesale prices that have been pushed far below levels that are sustainable in the long term, and prices that have been set without any reference to the retail rates that apply in parallel.

Evidence That UNE-P Deters Facilities-Based Competition. On the basis of data from all states with significant CLEC entry as of year-end 2001, *UNE-P and Investment* demonstrated that there is less facilities-based competition in states where there is more UNE-P usage. Figure 3 shows the same correlation with the data updated through June 2002: there continues to be a significant *negative* correlation between facilities-based competition and UNE-P usage.[154] The data here include all states in which facilities-based and UNE-P lines together represented at least 10 percent of BOC access lines as of June 2002.[155] Because of increases in UNE-P usage in the last six months, the new correlation covers 37 states – eleven more than the previous analysis. These 37 states account for 95 percent of all facilities-based CLEC lines, 97 percent of all UNE-P lines,[156] 92 percent of all CLEC switches, and 88 of all BOC access lines.

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[151] AT&T Reply Comments at 336; *see also* UNE-P Coalition Reply Comments at 7-10; Z-Tel Reply Comments at II-III.

[152] *Seidenberg Blames Regulators for Telecom's Economic Slump*, Communications Daily at 12 (Sept. 20, 2002) (quoting Precursor Group analyst Scott Cleland).

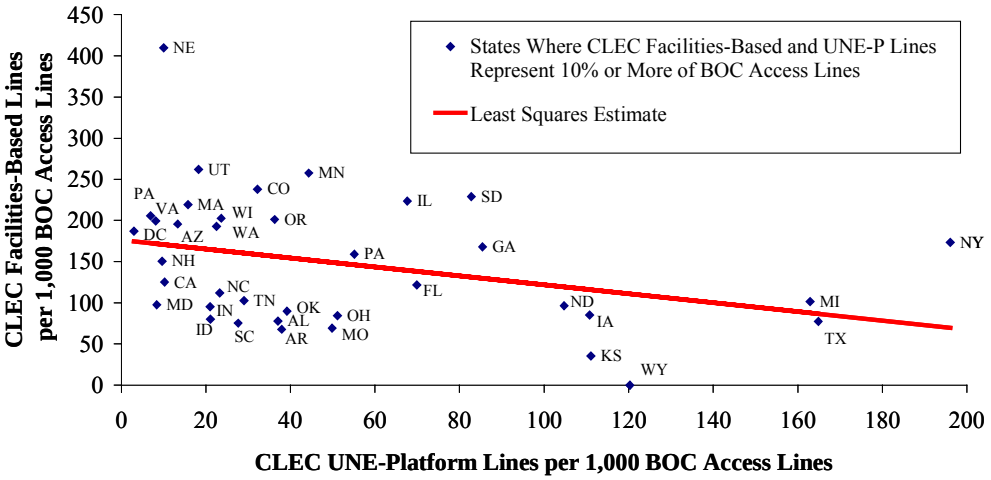
[153] *United States Telecom Ass'n v. FCC*, 290 F.3d 415, 424 (D.C. Cir. May 24, 2002).

[154] Appendix A contains the results of the *new* statistical analysis. It demonstrates that, to a 95-percent level of confidence, there is a statistically significant *negative* correlation between these two variables.

[155] This analysis normalizes CLEC lines against the BOC access lines within a state, rather than all ILEC lines within that state, because data are not available for CLEC lines in non-BOC territory (including in the former GTE territory). This permits an apples-to-apples comparison of the CLEC lines within a BOC's territory in a given state to the BOC's own lines within that state.

[156] As the *UNE-P and Investment* report explained, states where total CLEC lines represent less than 10 percent of BOC access lines are properly excluded from this analysis. These states typically have relatively low volumes of both facilities-based lines and UNE-P, which produces a close to 1:1 correlation between these two

Figure 3. Facilities-Based Competition Decreases as UNE-P Penetration Increases



The negative correlation is particularly evident in residential markets, which until recently have been the most heavily targeted by UNE-P providers. The 10 states with the highest levels of residential UNE-P competition accounted for three-quarters of residential UNE-P growth over the past six months, but only a third of the growth in facilities-based residential lines. *See* Figure 4. The 10 states with the highest levels of facilities-based residential competition accounted for 85 percent of growth in facilities-based residential lines, but only 16 percent of residential UNE-P growth. *See id*.

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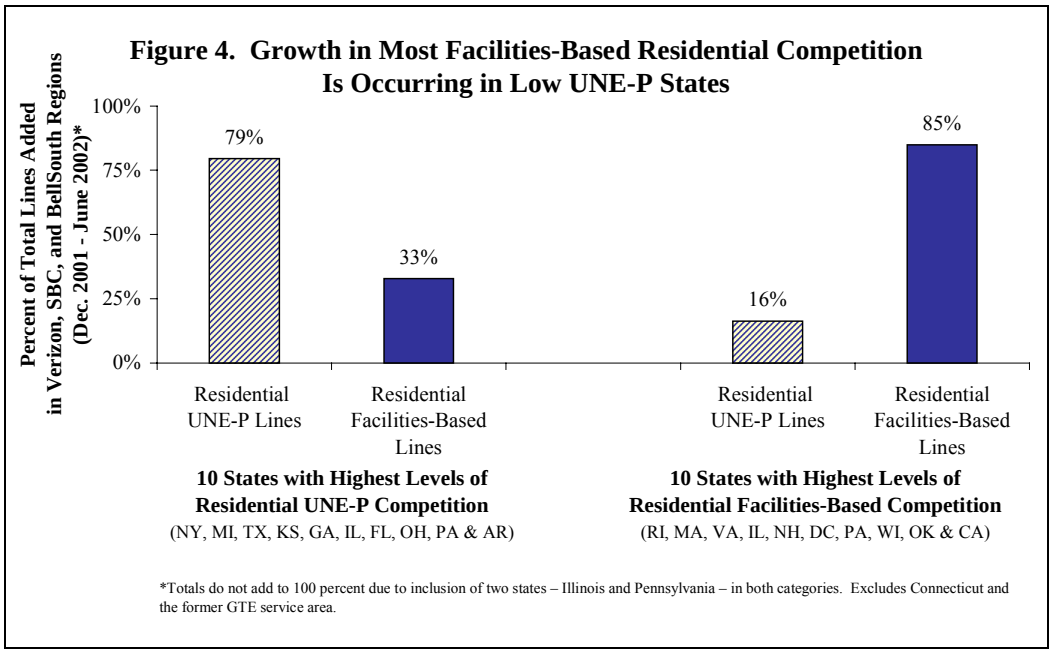
variables that, given the relatively small volumes involved, is not meaningful as a statistical matter. The 10-percent threshold applied in Figure 1 removes those states that merely add statistical noise to the analysis. In any event, including these states does not produce a statistically significant positive correlation, but rather a statistically insignificant correlation. There is accordingly no basis to WorldCom's claim that this analysis is somehow flawed because it doesn't include data for all 50 states. *See* WorldCom, *UNE-P: The Key to Local Competition* at 18 (Oct. 1, 2002), at 18.



There is every reason to expect that UNE-P will continue to impede facilities-based competition going forward.[157] As three of the largest UNE-P CLECs – AT&T, WorldCom, and Z-Tel – have all emphasized to their investors, UNE-P permits CLECs to compete without making *any* investment in their own competitive facilities. UNE-P allows CLECs to avoid " making economic sacrifices" (AT&T); it requires "very little capital" (WorldCom); it obviates the need for "capital investment in fiber optics and switches that existed in historical telecommunications models." (Z-Tel) .[158] Analysts following these companies report that UNE-P does not require "any meaningful incremental capital investment to deploy service, since all the local-network capital is invested by the RBOCs."[159]

There is no sign that these or other CLECs plan to migrate mass-market customers from UNE-P to facilities, even in markets where they have large numbers of UNE-P customers and have already deployed their own switches.[160] Indeed, recent evidence suggests that, in some

[157] *See, e.g., Raymond James UNE-P Analysis* at 1 ("UNE-P appears to be attractive relative to risking capital to gain customers").

[158] *AT&T 2Q Earnings Conference Call* (AT&T Consumer Services president and CEO Betsy Bernard: UNE-P gives AT&T "unmatched leverage to create offers . . . *without making economic sacrifices*."); Wayne Huyard, Chief Operating Officer, MCI, *Using UNE-P To Develop a Strong and Profitable Local Presence*, Goldman-Sachs Telecom Issues Conference, New York, NY (May 7, 2002) (WorldCom is "deploying *very little capital*" to provide UNE-P service) (emphasis added); Z-Tel Technologies Inc., Form 10-Q (SEC filed Aug. 14, 2002) ("we do not expect that the growth of our business will require the levels of capital investment in fiber optics and switches that existed in historical facilities based telecommunications models").

[159] A. Kovacs, *et al.*, Commerce Capital Markets, *Telecom Regulation Update: UNEP and 271* (Apr. 19, 2002).

[160] CTC – which claims to serve only business customers – asserts that its "business plan" is to migrate customers from UNE-P to its own facilities, but it does not provide any evidence that it has actually done so. *See* CTC Reply Comments at 3-5. WorldCom notes that "[n]either WorldCom nor AT&T, despite considerable

cases, competitors have even begun to migrate customers *off* of their own networks and back on to incumbents'.[161] WorldCom and Z-Tel candidly acknowledge that they have no plans to convert mass-market UNE-P customers to their own switches, and do not view it as economical to do so.[162] AT&T does claim to have converted "a substantial number of business customers" from UNE-P to its own facilities,"[163] but its recent declarations appear to indicate that this conversion involved only a relatively small number of lines that AT&T appears to have served through resale, not UNE-P.[164] UNE-P rates are set very much lower than resale rates, so the incentive to migrate UNE-P customers to facilities is concomitantly weaker. According to Broadview – one of the very few CLECs that actually has migrated UNE-P customers to its own facilities – other CLECs are using UNE-P as a "'parking lot' where CLECs may do little more than repackage the ILECs services."[165]

As for carriers other than AT&T and WorldCom, there is an increasingly sharp schism between CLECs that rely on UNE-P and those that deploy their own facilities. Among other CLECs, as of June 2002, approximately 60 percent of all UNE-P lines were being provided by companies that do not provide *any* lines at all over their own facilities.[166] *See* Figure 5. About 125 of these CLECs provide service through UNE-P exclusively; only about 43 use some mix of UNE-P and their own facilities. In residential markets, some 94 percent of residential UNE-P lines provided by these CLECs were being provided by companies that provide no residential lines at all over their own facilities. *See* Figure 6. This refutes the claims by some CLECs that UNE-P is a necessary component of any facilities-based strategy.

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investment in circuit switches, has managed to enter the residential or small business sectors via switch-based service." WorldCom Reply Comments at 147-148.

[161] For example, between June and September of this year, nine carriers in four Verizon states (Pennsylvania, New York, Virginia, and Maryland) have migrated several hundred business lines from their own facilities to UNE-P. SBC also has begun to receive requests for conversions of UNE-loop lines to the UNE-P.

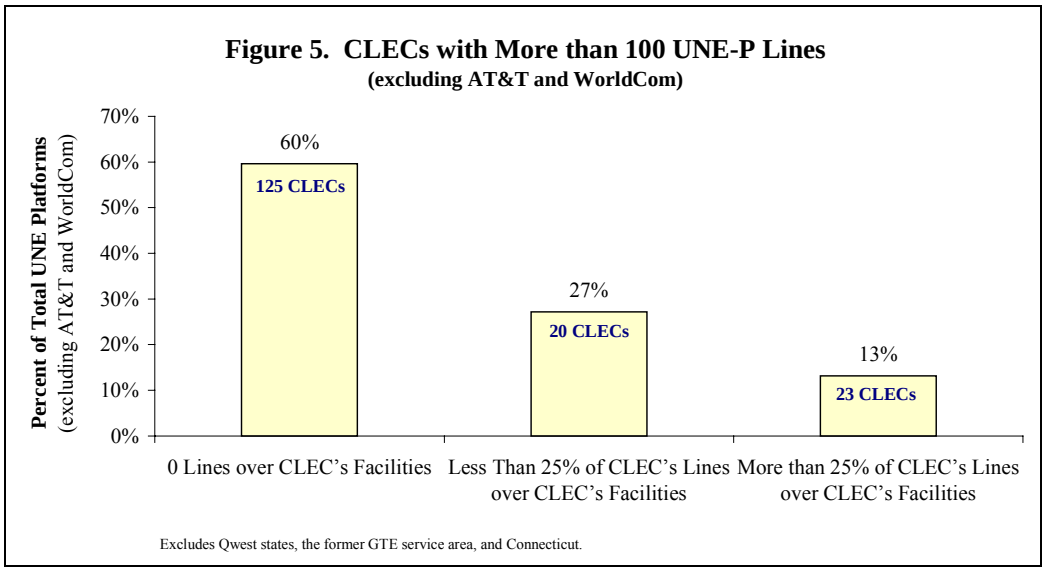
[162] *See*, *e.g.*, Z-Tel Comments at 36 ("According to Z-Tel's business model, *even if a switch in New York City were free*, it would never be profitable to deploy a switch and serve mass market consumers if CLECs had to pay $185 per customer up front.") (emphasis in original); WorldCom Reply Comments at 139 (WorldCom states that for "most telecommunications users" including "virtually all residential and small business customers, switch-based competition simply is not feasible.").

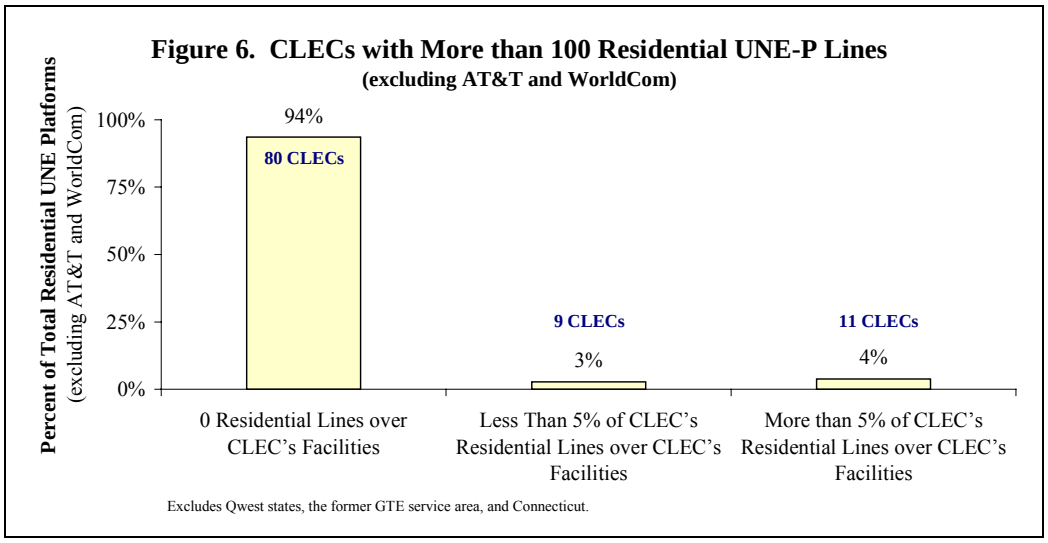
[163] AT&T Reply Comments at 340.

[164] AT&T's Lesher Reply Decl. ¶ 54 ("AT&T has in fact migrated at least 20,000 *TSR [total service resale]* customers to its own facilities in New York and there is no reason to think the result will be any different with UNE-P."). AT&T's initial comments did state that AT&T had converted business UNE-P lines to its own facilities, though it is unclear how this earlier statement squares with its more recent declaration. *See* AT&T's Brenner Decl. ¶ 50.

[165] Ex Parte Letter from S. Andreassi, Broadview, to Magalie Roman Salas, FCC, CC Docket No. 96-98, at 2 (July 3, 2001).

[166] These data do not include Qwest's service area, the former GTE service area, and Connecticut.





Finally, the empirical evidence that some CLECs proffer to show that UNE-P promotes facilities-based competition does not support that conclusion.

1. The "UNE Platform Coalition" argues that "states where local competition is strongest are those states where UNE-P is most widely available."[167] To support this claim, the UNE-P Coalition asserts that in New York, Illinois, Michigan, Pennsylvania, Texas, and Georgia "the principal driver of growth" in competitive lines between December 2000 to June 2001 was UNE-P.[168] But the record in those states establishes only that UNE-P penetration rises rapidly when prices are cut sharply. Most of the states that the UNE-P Coalition points to have *lower*

[167] UNE-P Coalition Reply Comments at 7; *see also* AT&T Reply Comments at 336 ("[S]tates that have required ILECs to offer UNE-P at reasonable rates that permit broad-based entry have the highest rates of CLEC market penetration").

[168] UNE-P Coalition Reply Comments at 7-9.

levels of facilities-based residential competition than states where UNE-P usage remains more limited. *See* Figure 2, *supra*.

2. Z-Tel has conducted two studies purporting to show that the modest restriction on the availability of switching UNE that the Commission put in place three years ago had the effect of discouraging further deployment of competitive switches: "the deployment of local switches by CLECs was inversely related to the percentage of the market affected by the unbundled local switching restriction."[169] These studies are nonsense. The switching restriction applies only in markets that *already have* lots of competitive switches, and if the competition already arrived yesterday, it cannot be expected to arrive again tomorrow. The restriction applies only to large business customers, but Z-Tel correlates it with a fall-off in competition for residential and small business customers, to whom the restriction does not apply. And, most importantly, SBC, Verizon, and Qwest did not avail themselves of the limited switching carve-out in the time period covered by Z-Tel's study because of the requirement in effect at that time that they provide EELs in order to do so.

3. Both Z-Tel and the UNE-P Coalition have conducted regression analyses comparing the levels of UNE-P within a state to the levels of usage of UNE loops; these analyses purport to show that UNE-loop strategies have not suffered at the expense of UNE-P strategies.[170] But to gauge the impact of UNE-P on facilities-based competition one must correlate UNE-P against some accurate measure of facilities-based competition. UNE loops don't begin to measure the extent of facilities-based competition, because the most aggressive facilities-based competitors deploy their own loops, too – fiber in business markets, and coaxial cable in residential markets.[171] The regression analysis in *UNE-P and Investment* and updated here examines the one relevant correlation, between UNE-P levels and *all* facilities-based competition – and it confirms that states with high levels of UNE-P tend to have low levels of facilities-based competition. In any event, other analysts have found that recent cuts in UNE-P rates "undermines the positioning of UNE-L CLECs in states like CA where the loop costs almost as much as the entire platform," and "leads to perverse motivation for traditional UNE-L CLECs to abandon a facilities-based model," which is "completely counter to FCC Chairman Powell's preference for facilities-based competition."[172]

UNE-P Is Being Used Primarily by AT&T and WorldCom To Capture High-end Residential Customers without Risk or Investment. CLECs that support UNE-P argue that it is the only vehicle that allows small CLECs broadly to enter the residential market.[173] But the facts

[169] Z-Tel's Ford Reply Decl. ¶ 59.

[170] UNE-P Coalition Reply Comments at 11-14; Z-Tel's Ford Reply Decl. ¶ 60.

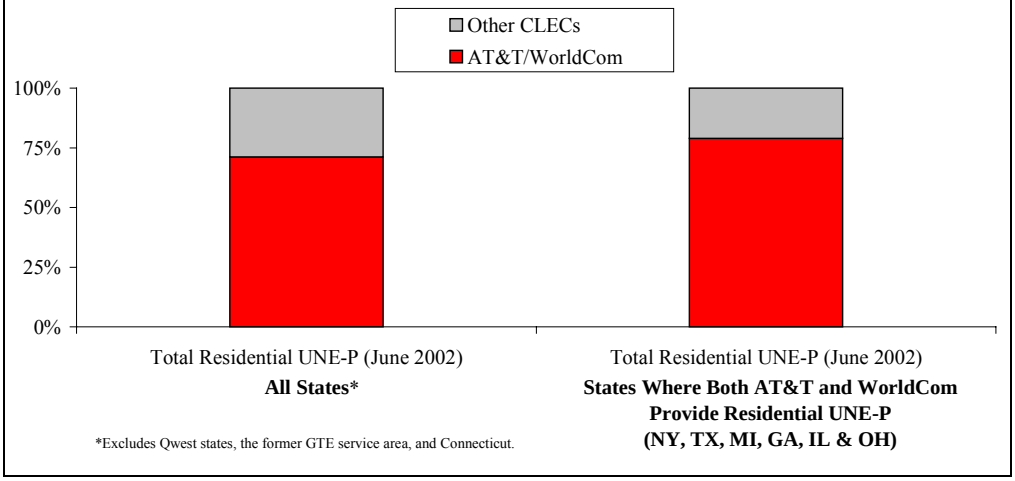
[171] *See UNE Fact Report 2002* at IV-1-6 & IV-9-11.

[172] Network Conceptions LLC, *Asleep at the Switch: UNE-P Rises as Catalyst for Massive Change in Local Telecom* (Oct. 15, 2002), http://www.netconllc.com/documents/UNE-P presentation Kaufman ver 2.pdf.

[173] *See*, *e.g.*, Talk America Comments at 14 ("The UNE-P offering is the only economically viable means of attaining a critical mass of residential customers."); AT&T's Huels Decl. ¶ 8 ("Hard experience in the marketplace has shown AT&T that the use of UNEs (particularly UNE-P) is the only way that AT&T can begin to . . . build a local residential customer base."); Navigator Comments at 6 ("UNE-P provides the toehold necessary for a small company to begin a customer base and . . . provide a competitive alternative to residential customers."); WorldCom Comments at 35 ("[I]f CLECs were denied access to UNE-P, they likely would withdraw from the

show that UNE-P is hardly being used that way at all. UNE-P is mainly a vehicle that allows AT&T and WorldCom to serve high-end residential customers in a limited number of markets where those two companies can earn fat margins with no risk and no capital investment.[174] AT&T and WorldCom purchase approximately 70 percent of all residential UNE-P lines. *See* Figure 7. They have focused all their UNE-P efforts in only certain states, and in the states where both provided UNE-P as of June 2002 they account for an even larger share of the UNE-P action – nearly 80 percent of residential UNE-P purchases to date. *See id.*

Figure 7. AT&T and WorldCom Account for Most Residential UNE-P



In their filings in this proceeding, AT&T, WorldCom, and others insist that UNE-P is what allows them to compete "in both urban and in more rural areas" – "across a broad range of customers and geographic areas without the same concerns for density that limit other strategies."[175] But once again, they are telling the investment community a diametrically

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residential and small business market."); PACE Coalition, *The UNE-P Fact Report: August 2002* at 2, 3 (Aug. 2002) ("UNE-P is particularly critical to competition in the core of the incumbent's monopoly, the typical residential and small business customer." "UNE-P extends competitive choice from the largest to the smallest wire centers, resulting in a competitive profile that no other strategy can match.").

[174] *See*, *e.g.*, D. Zito, *et al.*, Legg Mason Wood Walker, Investext Rpt. No. 8617918, Telecommunications – Cautious Long-Distance Outlook – Industry Report at *11 (June 27, 2002) (Legg Mason: "[W]e believe [Zone 1 (most densely populated)] will represent the primary target for IXC local [UNE-P] initiatives."); R. Fagin, Bear Stearns & Co., Investext Rpt. No. 8636978, Telecommunications Services: No Relief in Sight – Regulatory and Legislative Update – Industry Report at *3 (July 12, 2002) ("AT&T and WorldCom are the most aggressive companies leveraging UNE-P to compete."); J.B. Grubman, *et al.*, Salomon Smith Barney, Investext Rpt. No. 8504572, WorldCom Inc. – MCI Group – Company Report at *3 (Apr. 25, 2002) ("Since certain regions within a state may have different UNE-P pricing (*i.e.*, UNE-P pricing tends to be more expensive in rural areas), MCI may only target specific regions within a state. For example, it is currently targeting only 45% of Alabama, but 100% of Michigan."); *Raymond James UNE-P Analysis* at 4 (UNE-P competitors "go after" "higher revenue and higher-margin customers" – "residential customers in dense, urban areas who desire bundles including long distance, multiple vertical services, and local voice").

[175] PACE Coalition, *The UNE-P Fact Report: August 2002* at 3 (Aug. 2002); *see also* AT&T Reply Comments at 335 ("CLECs can use UNE-P to offer service ubiquitously in a given market."); WorldCom Comments at 32 ("MCI's goal is to 'reach 70% of all U.S. households in ILEC territory by the end of this year.' UNE-P is the only viable option for achieving that goal.").

different story. Investors are being assured that AT&T's goal is to "design and target each offer to high-value customers," and that AT&T "[is]n't in the business just to gain subscribers. Our principle of maximizing cash requires that we only enter states that meet our gross margin requirements. Once we've entered a state, we design and target each offer to high-value customers to further improve the economics of the business."[176] WorldCom is "targeting [its] efforts to the lowest priced urban zones and in some cases the middle-priced suburban zones, but rarely in the high-priced rural zones."[177] Both companies typically fold UNE-P into bundled packages of services that are designed to appeal only to high-end residential customers.[178] Z-Tel, the fifth largest UNE-P provider, relies on the same strategy.[179] These companies also aim their UNE-P efforts at states and UNE-P zones where the costs of doing business are well below the average. AT&T is "not going into states where we don't have a gross margin of 45 percent on the local."[180] WorldCom aims to "limit and target where we sell based on cost."[181]

As a result of these strategies, UNE-P penetration is concentrated in dense wire centers. For example, penetration rates are about 50 percent higher in wire centers with more than 10,000 lines than they are in wire centers with less than 10,000 lines.[182] *See* Figure 8. Nearly 90 percent of all UNE-P lines are concentrated in the top one-third of all wire centers. *See id.*

[176] *AT&T 2Q Earnings Conference Call* (AT&T Consumer Services president and CEO Betsy Bernard).

[177] Wayne Huyard, Chief Operating Officer, MCI, *Using UNE-P To Develop a Strong and Profitable Local Presence*, Goldman Sachs Telecom Issues Conference, New York, NY (May 7, 2002).

[178] *See*, *e.g.*, *id.* ("Today Neighborhood Complete, which is the bundle at $49.99 [] in the State of New York, is the vast majority of what we sell."); *AT&T 2Q Earnings Conference Call* (AT&T Consumer Services president and CEO Betsy Bernard: "We will seize any opportunity that makes sense which we demonstrated by creating AT&T Unlimited and our targeted all-distance offer. Both of which enable us to retain our high valued customers and attract others from our competitors.").

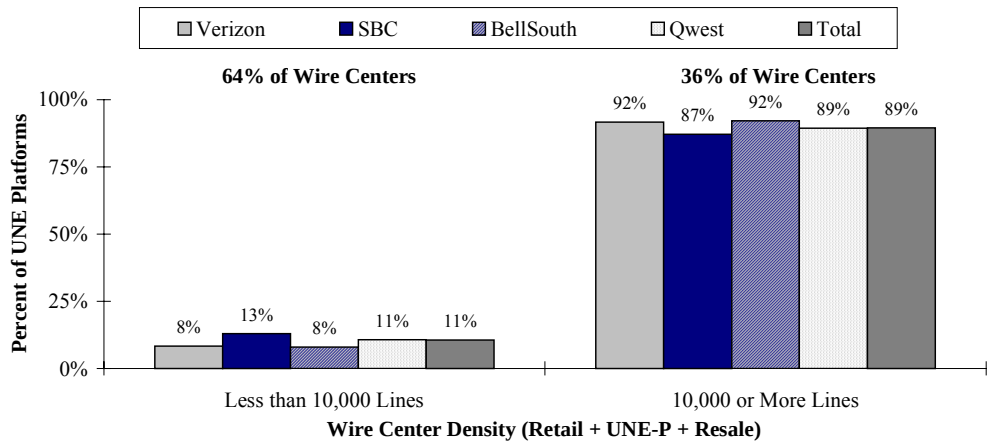
[179] Z-Tel's "flagship" residential product – Z-LineHome – offers a unlimited local and long distance calling, plus numerous features such as voice-mail and call-waiting, for a flat rate. Z-Tel, *Z-LineHome, Features and Options,* http://www.z-tel.com/portal/ztel/learn/i/ZLineHomefeatures.jsp.

[180] *AT&T 2Q Earnings Conference Call* (quoting AT&T Consumer Services president and CEO Betsy Bernard).

[181] Wayne Huyard, Chief Operating Officer, MCI, *Using UNE-P To Develop a Strong and Profitable Local Presence*, Goldman Sachs Telecom Issues Conference, New York, NY (May 7, 2002).

[182] UNE-P penetration in wire centers with 10,000 or more lines is approximately 5 percent, whereas UNE-P penetration in wire centers with fewer than 10,000 lines is approximately 3.6 percent.

Figure 8. UNE-P Is Highly Concentrated in Dense Wire Centers



Most other UNE-P providers do not market to residential customers at all; instead, they market exclusively to high-margin business customers. Among the 16 CLECs that make up the UNE-P Coalition, half say that they serve only business customers,[183] and the other half account for only 8 percent of all residential UNE-P nationwide. Among the nine CLECs that make up the PACE Coalition, all but three state that they serve only business customers.[184]

Despite the focus of these UNE-P CLECs on business customers, most competition for business customers is facilities-based – a trend, though, that is beginning to change as states dramatically slash UNE-P prices. As of June 2002, approximately three-fourths of all competitive business lines were still provided in whole or in part over CLEC facilities, including in all cases CLEC local switches.[185] *See* Figure 9. And once again, business UNE-P usage has been heavily concentrated in areas that already have extensive facilities-based competition.[186] The CLECs that have traditionally purchased business UNE-P in these markets have just been cherry-picking the customers and the markets where this form of synthetic competition is wholly unnecessary.

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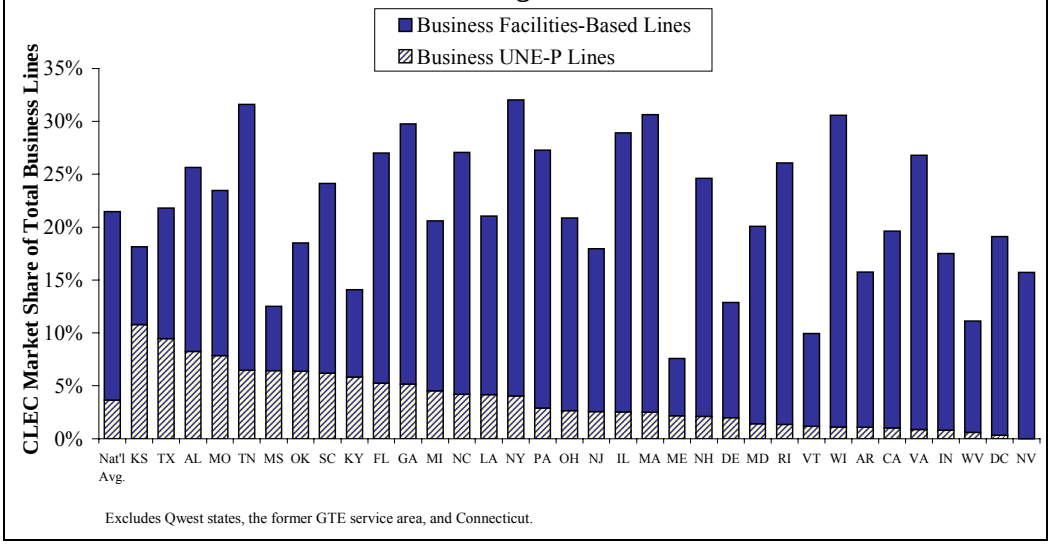
[183] *See* Access Integrated Networks, *About Access*, http://www.accesscomm.com/AboutAccess.aspx; UNE Platform Coalition Comments at 7; DSCI Corporation, *About Us*, http://www.dscicorp.com/about/about.htm; IDS Telecom LLC, *FAQ*, http://www.idstelcom.com/flash/index.html; InfoHighway Comm. Corp., *About Us*, http://www.infohighway.com/about_home.html; ionex Press Release, *ionex telecommunications, inc. Announces New Corporate Headquarters* (Oct. 5, 2001); ITC^DeltaCom, Inc., Form 10-Q (SEC filed Aug. 14, 2002); nii communications, *Products and Services*, http://www.niicommunications.com/.

[184] *See* Access Integrated Networks, *About Access*, http://www.accesscomm.com/AboutAccess.aspx; UNE Platform Coalition Comments at 7; IDS Telecom LLC, *FAQ*, http://www.idstelcom.com/flash/index.html; InfoHighway Comm. Corp., *About Us*, http://www.infohighway.com/about_home.html; ITC^DeltaCom, Inc., Form 10-Q (SEC filed Aug. 14, 2002); nii communications, *Products and Services*, http://www.niicommunications.com/. In Qwest's region – where AT&T and WorldCom have provided UNE-P to only a very limited extent thus far – the vast majority of UNE-P lines (estimated at approximately 75 percent) are used to serve business customers.

[185] Excluding Qwest's service area, the former GTE service area, and Connecticut.

[186] For example, data for Southwestern Bell states show that more than 70 percent of all business UNE-P is provided in area codes that already have facilities-based business competition.

Figure 9. Most Competition for Business Customers Is Provided through CLEC Facilities



Although facilities-based competition for business customers has emerged without the UNE-P, CLECs are increasingly using UNE-P to serve business customers in many states, which threatens to devalue the significant investment that has been made to date and to forestall any future investment. According to BOC data, total UNE-P business lines have increased by more than 30 percent in just the last six months. These data also show that a number of facilities-based CLECs have begun adding more business lines through UNE-P than through their own facilities. Indeed, several facilities-based business carriers – including AT&T and WorldCom – have recently announced efforts to step-up their efforts to serve the business market using UNE-P.[187] In Verizon's region, average monthly business UNE-P volumes more than doubled beginning in July of this year, which has occurred at the same time that some carriers have begun migrating customers from their own facilities to UNE-P.

III. CLECs Have Extensively Deployed Switches, Transport, and High-Capacity Loops.

A. Local Switching.

The *Fact Report* demonstrated that, as of year-end 2001, CLECs had deployed approximately 1,300 local circuit switches, which they were using to serve no fewer than 16 million local lines, with the actual total probably closer to 23 million local lines.[188] The *Fact Report* also demonstrated that CLEC switches are now so geographically ubiquitous that they serve customers in wire centers that account for about *86 percent* of the Bell companies' access

[187] *See*, *e.g.*, WorldCom Press Release, *Now Open for Small Businesses: The Neighborhood Built by MCI* (June 13, 2002) (The Neighborhood is now available to businesses in 18 states and "soon reaching nearly half of all U.S. small businesses."); *AT&T 2Q Earnings Conference Call* (noting that "UNE-P lines now represents a little over 15 percent of the voice business access lines" that AT&T serves).

[188] *See UNE Fact Report 2002* at II-1.

lines.[189] The *Fact Report* also established that CLECs are using their switches to serve mass-market customers as well as large business customers.[190] As of year-end 2001, CLECs were serving at least 3 million residential lines over their own switches, and were offering mass-market service to many times that number.[191]

The CLECs do not seriously challenge the count of CLEC switches used in the *Fact Report*.[192] Although the *Fact Report* identified more than 200 CLECs that are operating circuit switches, only AT&T claims that its actual switch count differs from the total attributed to it in the *Fact Report*.[193] But as AT&T acknowledges, the *Fact Report* attributed *fewer* switches to AT&T than AT&T claims it actually operates.[194] And while AT&T claims that the *Fact Report*'s totals for four other CLECs are at odds with other publicly available sources,[195] the discrepancy – if those other sources are in fact correct – amounts to only about 105 switches, less than 8 percent of the total.[196]

No CLEC challenges the *Fact Report*'s finding that CLECs as a group are using their own circuit switches to serve customers in wire centers that reach approximately 86 percent of all BOC switched access lines, including approximately 89 percent of all business lines and approximately 84 percent of all residential lines. AT&T – again the only commenter even to address these data – merely attempts to characterize it as "unimpressive," by focusing on the percentage of raw wire centers served by CLECs switches, rather than the percentage of lines contained in those wire centers.[197] But CLECs obviously target dense wire centers, and the percentage of lines served by those wire centers is obviously the relevant number in a competitive analysis. And, contrary to AT&T's assertion,[198] this evidence does not merely show

[189] *See id.* at II-1 & App. C.

[190] *See id.* at II-4, II-10 – II-12.

[191] *See id.* at II-10.

[192] Indeed, the total reported in the *Fact Report* – which is based on information from the LERG database – is within about 80 switches (6 percent) of the total reported in New Paradigm's *CLEC Report*. *See id.* at II-1 n.2.

[193] In addition, ITC^DeltaCom asserts that the *Fact Report* counted as switches some of ITC's points of interconnection ("POI"). *See* ITC^DeltaCom Reply Comments at 19-20. But the *Fact Report* specifically excluded all equipment that CLECs designated as POIs in the LERG. To the extent the *Fact Report* improperly counted ITC's POIs as switches, it is likely because ITC improperly labeled its POIs as switches in the LERG. In any event, the discrepancy identified by ITC involves only a small number of switches. In addition, ITC concedes that is using switches in some location to serve all of the locations that the *Fact Report* identified as containing an ITC switch.

[194] *See* AT&T's Pfau Reply Decl. ¶ 13 n.4 (showing that AT&T has 270 switches, rather than 247 as stated in the *Fact Report*).

[195] *See* AT&T's Pfau Reply Decl. ¶ 13 n.4.

[196] One likely reason for the discrepancy between the switch counts in the *Fact Report* and other public sources is the treatment of remote switches. Although the *Fact Report* made every effort to distinguish between full switches and remotes, some carriers do not clearly distinguish between the two in the LERG database. It is possible, therefore, that some of the switches that the *Fact Report* attributed to CLECs are remote switches, not full central office switches.

[197] AT&T Reply Comments at 353-354.

[198] *See* AT&T Reply Comments at 352-353.

that it is technically feasible for CLECs to serve customers in many geographic markets, it shows that they are already doing so.

AT&T and a few other CLECs next argue that, although CLECs may have deployed switches widely, "it is not economic or practical to deploy switches to serve the mass market."[199] But as described in Part I above, CLECs – including AT&T – have already deployed switches that they are using to offer service to more than 10 percent of all U.S. homes. And while AT&T claims that it uses its switches "almost exclusively to provide services to large businesses with intense demand for telecommunications services," the facts show otherwise.[200] AT&T itself serves at least 1.8 million residential lines over its own switches compared to about 3 million business voice lines. *See* Table 4, *supra*. And AT&T has previously admitted that it can profitably serve mass-market customers over its own switches.[201] So have other CLECs, including those that use their own switches together with unbundled loops to serve mass-market customers.[202] In any event, to the extent that CLECs prefer to use their switches to serve business customers, it is largely because retail rates are much higher for these customers and offer greater cream-skimming opportunities, not because of any significant technical or economic differences that make it possible to use these switches to serve businesses, but not residences.

B. Interoffice Transport.

The *Fact Report* demonstrated that CLECs have deployed extensive interoffice transport facilities of their own. CLECs have deployed at least 184,000 route miles of fiber, most of which is used for local transport.[203] Local fiber is now being supplied to CLECs by carrier-agnostic wholesale suppliers, utility companies, and interexchange carriers.[204] As of year-end 2001, one or more CLECs had obtained fiber-based collocation in BOC wire centers that contain more than half of all business lines served by the Bell companies, and in more than 60 percent of

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[199] AT&T Reply Comments at 351; *see also* AT&T's Pfau Reply Decl. ¶¶ 5-22; Z-Tel Reply Comments at 31-33, 35; WorldCom Reply Comments at 143-144.

[200] AT&T Reply Comments at 349.

[201] *See* AT&T, *Earnings Commentary – Quarterly Update – Second Quarter 2002* at 10 (July 23, 2002) (Cable "[t]elephony EBITDA margin was positive on a full-quarter basis."); AT&T Broadband, *Investor Presentation* at 38 (July 25, 2001) (Chuck Braden, AT&T Broadband EVP of Broadband Services and CTO, in July 2001: "[w]ith 850,000 telephony subscribers and achieving break-even ahead of plan, we are positioned to realize significant financial returns.").

[202] *See Cox* Communications, *The Case for Cable Telephony*, *attached to* Cox Communications Press Release, *Cox Communications Surpasses Half Million Customers for Residential Digital Telephone Service* (Apr. 22, 2002) (Cox "installed switches and other necessary telecom equipment and delivers calls over its own broadband network. . . . . Residential telephony generated operating margins in the mid-twenty-percent range for the full year 2001, with margins approaching 30% in the fourth quarter. Cox expects company-wide steady-state telephony margins to reach 40%."); Cavalier Telephone Press Release, *Cavalier Telephone Revenues Soar Operational Earnings Turn Positive* (July 11, 2002) (Cavalier vice president of finance David White: "Our investment in . . . switching networks gives us advantages in the marketplace. More importantly, we are beginning to reach economies of scale, which combined with our low cost structure, improve profitability.").

[203] *See UNE Fact Report 2002* at III-6.

[204] *See id.* at III-8 – III-14.

all BOC wire centers that serve over 10,000 business lines. And as the *Fact Report* explained, these figures are conservative because, with all the competitive fiber that has been deployed, a considerable amount of traffic also now bypasses ILEC wire centers completely.

Fiber-Based Collocation. CLECs concede that competitive transport is available to serve a large fraction of their needs – as much as 50 percent in the case of one CLEC (Covad).[205] The CLECs also admit that they frequently rely on different providers for transport in different markets, creating patchwork networks to supply their needs.[206] They concede that in a significant number of wire centers – and undoubtedly those serving a large fraction of all lines – there are sufficient traffic volumes to justify construction of their own transport.[207] And they acknowledge that they "often engage[] in joint builds with other CLECs in order to share the high fixed costs of construction."[208]

CLECs nonetheless fail to provide any specific data regarding the precise geographic markets or the typical sizes or densities of wire centers in which they rely on alternative transport providers. The *Fact Report* provides the only comprehensive data of this kind. The data show that there are multiple CLECs with fiber-based collocation in a large number of BOC wire centers, and those wire centers serve a significant share of BOC access lines. The data also show that wire centers with at least a modest number of business lines typically attract one or more fiber-based collocator.

The CLECs' main response to these facts is that the existence of fiber-based collocation in one office does not establish a point-to-point link between any given pair of ILEC offices[209] – the competitive fiber may instead connect an office to a large businesses, or to an interexchange carrier POP.[210] As the parties that have obtained fiber-based collocation, the CLECs could of

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[205] *See* Covad Comments at 67-69; *see also* AT&T's Fea/Giovannucci Reply Decl. ¶ 49, n.23 ("AT&T has undertaken a comprehensive plan to convert interoffice facilities to alternative providers when possible. While AT&T continues to look for additional opportunities for such conversion, in general AT&T has taken advantage of such alternatives where possible."); Mpower Reply Comments at 13-15 (Mpower has alternative options for transport for over 50 percent of the routes it currently requires.); Broadview Networks, *Bringing Competitive Choice to Residential and Business* Customers, *attached to* Ex Parte Letter from Heather Burnett Gold, KDW Group, to Marlene Dortch, FCC, CC Docket Nos. 01-338, 96-98 & 98-147 (Aug. 2, 2002) ("Broadview has [] been able to order alternate [IOF] facilities 20% of the time").

[206] *See*, *e.g.*, Conversent Reply Comments at 7-8 (stating that it purchases dedicated transport and dark fiber from three competitive providers, and that it "can and does" self-provision dark fiber); AT&T's Fea/Giovannucci Reply Decl. ¶ 49, n.23 ("AT&T has undertaken a comprehensive plan to convert interoffice facilities to alternative providers when possible. While AT&T continues to look for additional opportunities for such conversion, in general AT&T has taken advantage of such alternatives where possible."); *id.* ¶ 50 (While "AT&T generally seeks alternate providers that can provide facilities nationwide," it "occasionally uses a small-scope supplier in order to accommodate specific customer requirements.").

[207] *See*, *e.g.*, AT&T's Fea/Giovannucci Reply Decl. ¶ 25 (acknowledging that in 30 percent of ILEC wire centers there is sufficient traffic to fill a single DS-3 to reasonable levels of utilization); *id.* ¶ 58 (acknowledging that AT&T self-supplies a significant percentage of its DS-3 transport).

[208] AT&T's Fea/Giovannucci Reply Decl. ¶ 28.

[209] *See*, *e.g.*, Covad Reply Comments at 61-62; WorldCom Reply Comments at 125-126 & n.421; Allegiance Reply Comments at 26 n.22.

[210] Covad Reply Comments at 61-62.

course resolve this issue with the real data that they have opted not to supply. But in any event, central offices and the tandem switches through which most interoffice trunks are routed are typically points of much higher traffic concentration than any customer's premises or IXC's POP. If a CLEC has deployed fiber in a central office to connect to an IXC or end user, it is very likely indeed that it has also extended that fiber to nearby tandem switches and end offices, or that it could readily do so.

Nor do CLECs need to connect wire centers in point-to-point pairs; as the *Fact Report* explained, they can knit together local transport using a combination of their own and other competitive carriers' facilities.[211] CLECs admit that they often do work with multiple carriers to create patchwork transport networks. WorldCom recently acknowledged that it "contracts with 41 CLECs" for fiber.[212] And ILECs are no longer the sole, and in many cases are not even the primary, points of traffic aggregation. The majority of all traffic today is data traffic, and many – if not most – of the main points of aggregating data traffic are located outside of the ILEC network – at NAPs, IXC POPs, data centers, and collocation hotels.[213] It also is important to keep in mind that unbundling significantly deters the building of competitive transport networks and distorts the true economics of building such facilities.[214] However large the traffic volumes, there is little incentive to build competitive interoffice links where UNEs are available at bargain-basement rates.

Finally, AT&T and a few other CLECs question the reliability of the data regarding fiber-based collocation on the grounds that it may include collocation arrangements of CLECs that have gone bankrupt.[215] Contrary to AT&T's speculative claims,[216] however, the *Fact Report* did not rely on outdated fiber-based collocation data; it relied on collocation arrangements that were still *in-service* as of year-end 2001. Although some CLECs may have gone bankrupt since that time, they typically have continued their existing operations while in bankruptcy proceedings,[217]

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[211] *See UNE Fact Report 2002* at III-5.

[212] WorldCom, *Hi-Cap Competition* at 6 (Oct. 7, 2002), *attached to* Ex Parte Letter from Ruth Milkman, Counsel for WorldCom, to Marlene Dortch, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (Oct. 7, 2002).

[213] *See UNE Fact Report 2002* at III-4.

[214] Dresdner Kleinwort Wasserstein concludes that "under a more rational local competitive framework, overbuilding might have occurred to a greater extent." B. Roberts, *et al.*, Dresdner Kleinwort Wasserstein, *UNe-P: The Unprofitable RBOC* at 3 (Aug. 9, 2002).

[215] *See* AT&T Reply Comments at 276-277; Allegiance Reply Comments at 44-45; Covad Reply Comments at 62.

[216] AT&T Reply Comments at 276-277.

[217] *See*, *e.g.*, Birch Telecom Press Release, *Birch Announces Agreement on Debt Restructuring* (July 29, 2002) (Dave Scott, Birch President and CEO, said of the bankruptcy filing, "I want to assure existing and prospective customers that this is purely a financial transaction. . . . Customers, suppliers and employees will be unaffected."); ITC^DeltaCom Press Release, *ITC^DeltaCom Announces Proposed Plan of Reorganization to Reduce Total Debt by $515 Million* (June 25, 2002) ("During the reorganization process, the Company will conduct business as usual with its customers."); WorldCom Press Release, *WorldCom Files for Bankruptcy Court Protection* (July 21, 2002) ("Chapter 11 allows a company to continue operating in the ordinary course of business and to maximize recovery for the company's stakeholders. The filings will enable the company to continue to conduct business as usual while it develops a reorganization plan.").

and many have since emerged from bankruptcy, or have transferred their assets to other solvent companies. *See* Part I.D, *supra*.

Competitive Fiber. The *Fact Report* demonstrated that CLECs have deployed extensive local fiber networks and that there has also been a rapid increase in local fiber supplied by "carrier-agnostic" wholesale suppliers. The CLECs have responded with very little data regarding the extent of their fiber networks. But the route-mile totals that have been provided are consistent with those used in the *Fact Report*.[218] With the exception of one CLEC whose claims have been addressed elsewhere,[219] no CLEC disputes the *Fact Report*'s detailed descriptions of where CLEC networks have been deployed.

A few commenters attempt to dismiss the *Fact Report*'s fiber deployment data as "misleading" or "meaningless" because, as the *Fact Report* clearly noted, there is no way to distinguish local and long-haul fiber.[220] But as the *Fact Report* explained – and as no CLEC disputes – CLECs' own public disclosures confirm that most of the 184,000 fiber route miles counted are local.[221] Significant amounts of long-haul fiber are apparently included in the fiber-route-mile totals of only four of the 33 CLECs that comprise that total.[222]

A few commenters also argue that some of the wholesale suppliers of local fiber described in the *Fact Report*'s are in financial distress.[223] But even those wholesalers that have sought bankruptcy protection are still operating their networks, and some are now emerging from bankruptcy. Others have weathered the recent slowdown and continue to add customers and new networks.

- MFN "will continue to operate without interruption," during its Chapter 11 proceedings, and will ensure that its "top-notch service levels will not be compromised by the reorganization process."[224] It "has picked up orders from

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[218] *Compare*, *e.g.*, AT&T Comments at 150 (17,000 local fiber route miles) *with* New Paradigm Resources Group, Inc., *CLEC Report 2002*, Ch. 6 – AT&T at 1 (15th ed. 2002) (16,000 fiber route miles). AT&T's president has recently indicated that AT&T has now built "18,000 route miles of fiber," which suggests that AT&T has been adding new fiber rapidly. *See* David Dorman, President, AT&T, Presentation at the Goldman Sachs Communacopia Conference, Transcript of Remarks (Oct. 2, 2002).

[219] *See* Ex Parte Letter from Whit Jordan, BellSouth, John W. Kure, Qwest, Jay Bennett, SBC, and W. Scott Randolph, Verizon, to Marlene H. Dortch, FCC, CC Docket Nos. 01-338, 96-98, and 98-147 (Sept. 4, 2002).

[220] *See* AT&T Reply Comments at 282 & nn.220-221; WorldCom Reply Comments at 125; Allegiance Reply Comments at 44; NuVox *et al.*'s Jenn Aff. ¶ 11; El Paso Networks/CTC Communications Reply Comments at 26, 36-38; Sprint Reply Comments at 35-36.

[221] *See* AT&T Reply Comments at 282 & nn.220-221; WorldCom Reply Comments at 125; *see also* Allegiance Reply Comments at 44; NuVox *et al.*'s Jenn Aff. ¶ 11; El Paso Networks/CTC Communications Reply Comments at 26, 36-38.

[222] *See UNE Fact Report 2002* at III-10 – III-11 & Table 7.

[223] Some of the companies do not even hold themselves out as providers of dark fiber at all. Several rely at least partially on capacity from other companies on the list, and the remaining companies have extremely limited offerings. AT&T Reply Comments at 261-263; AT&T's Pfau Reply Decl. ¶¶ 35-50; El Paso Networks/CTC Communications Reply Comments at 17-23, 26-27.

[224] Metromedia Fiber Network Press Release, *Metromedia Fiber Network, Inc. To Reorganize Through a Voluntary Chapter 11 Filing* (May 20, 2002) (quoting John Gerdelman, president and chief executive officer of

customers even since filing for bankruptcy protection," and the company's networks in cities along the Northeast corridor – "as well as in Dallas and Houston, where oil and gas companies have been reliable customers, and in technology-rich Western cities such as San Jose, Calif., San Francisco and Seattle" – are already profitable.[225]

- Williams emerged from bankruptcy protection on October 16, 2002.[226] Its reorganization plan makes it "a financially stronger company, well-positioned to provide reliable, superior service over the long-term."[227]

- NEON's operations "continue uninterrupted,"[228] during its bankruptcy, and "revenue is growing enough to run the company."[229]

- American Fiber Systems completed a new metropolitan fiber network in Cleveland in July 2002,[230] and announced in September 2002 that it had signed a 20-year agreement with Missouri Network Alliance, LLC (MNA) for dark-fiber service in Kansas City.[231]

- FiberTech announced in September 2002 the "completion of a 70-mile fiber optic network located in the central business district and other suburban areas of Columbus, Ohio."[232] It also "expects to complete construction in Worcester and Springfield, Mass., New Haven, Conn., and Binghamton, N.Y., over the next several months," and has engineering work under way in 10 other cities.[233]

- Progress Telecom's revenues grew 40 percent in 2001. It numbers among its major clients "Level 3, Qwest, Sprint, Williams, WorldCom and CLECs – the

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MFN); *see also id.* (MFN has "reached an agreement with its senior secured lenders which will enable the Company to fund its operations while it implements its plan to become cash flow positive.").

[225] A. Drury, *Metromedia Fiber Network Rose Fast, Fell Hard*, Journal News (Aug. 22, 2002) (quoting Metromedia senior vice president of network operations Bill LaPerch).

[226] Williams Communications Press Release, *Williams Communications Completes Restructuring, Exits Chapter 11* (Oct. 16, 2002).

[227] Williams Communications Press Release, *Court Confirms Williams Communications Group's Plan of Reorganization* (Oct. 1, 2002).

[228] Northeast Optic Network Press Release, *NEON Communications to Complete Financial Restructuring and Reduce Debt by Approximately $250 Million Through a Negotiated Chapter 11 Filing* (June 26, 2002).

[229] *Fastest-Growing Companies: Stock Market Catches Up to Once High-flying Companies*, Boston Bus. J. (Sept. 13, 2002).

[230] American Fiber Systems Press Release, *American Fiber Systems' Cleveland, OH Dark-Fiber Network Now Operational* (July 2, 2002).

[231] American Fiber Systems Press Release, *Missouri Network Alliance Signs Dark-Fiber Network Agreement with American Fiber Systems* (Sep. 24, 2002).

[232] Fibertech Networks Press Release, *Fibertech Networks Completes Columbus, Ohio Fiber Optic Network* (Sep. 4, 2002).

[233] *Id.*

latter often to provide connectivity from COs to their own switch sites." About 60 percent of the revenues come from metro services, 30 from a combination of metro and long-haul transport, and 10 percent from purely long-haul services.[234]

- In August 2002, Looking Glass Networks "announced over $60 million dollars in customer contracts on the first anniversary of the launch of its inaugural network in Dallas." The company provides service in "Atlanta, Chicago, Dallas, Houston, Los Angeles, New York City/N. New Jersey, San Francisco, Seattle and Washington, D.C./N. Virginia."[235]

- In July 2002, Level 3 announced that it signed agreements to provide both metropolitan and inter-city dark fiber to CENIC, a non-profit corporation founded by California's public and private universities.[236] Level 3 added 5,000 *local* fiber miles in the second quarter of 2002.[237]

C. High-Capacity Loops.

The *Fact Report* demonstrated that CLEC fiber networks now reach a large number of commercial office buildings – approximately 30,000 nationwide – which contain an even larger number of high-volume customers. As of year-end 2001, CLECs served at least 156 million voice-grade equivalent circuits, the majority of which they provided over high-capacity facilities they deployed themselves. And as noted in Part I above, that figure has risen to 167 million as of June 2002. The *Fact Report* also demonstrated that CLECs purchase only a small number of high-capacity loops from the BOCs, and that they serve the vast majority of their customers with their own last-mile facilities.

Buildings Served. Only a few CLECs provide information regarding the number of buildings they serve with fiber; the totals they provide, however, are consistent with those set out in the *Fact Report*.[238] And AT&T acknowledges that it continues to expand its local fiber

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[234] S. Masud, *Making Headway*, Telecom Flash (Sept. 26, 2002).

[235] Looking Glass Networks Press Release, *Looking Glass Networks Awarded Over $60 Million Dollars in Lit Services, Dark Fiber and Collocation Contracts* (Aug. 20, 2002).

[236] Level 3 Communications Press Release, *Level 3 Providing Dark Fiber to Research and Education Community in California* (July 29, 2002).

[237] *Compare* Level 3 Press Release, *Level 3 Reports Second Quarter Results* (July 18, 2002) (937,000 local fiber miles to date) *with* Level 3 Press Release, *Level 3 Reports First Quarter Results* (Apr. 23, 2002) (932,000 local fiber miles to date).

[238] *Compare* AT&T Comments at 152 (6,000 buildings served) *with* New Paradigm Resources Group, Inc., *CLEC Report 2002*, Ch. 6 – AT&T at 1 (15th ed. 2002) (6,000 buildings served); *compare* Credit Suisse First Boston, *Telecom Services: CLECs Third Quarter Vital Signs Review* at 21, Exhibit 16 (Dec. 2001) (1,481 buildings served for McLeodUSA) *with* New Paradigm Resources Group, Inc., *CLEC Report 2002*, Ch. 6 – McLeodUSA at 1 (15th ed. 2002) (1,336 buildings served); *compare* KMC Telecom, 10-Q (SEC filed Nov. 9, 2001) (14,284 buildings served) *with* New Paradigm Resources Group, Inc., *CLEC Report 2002*, Ch. 6 – KMC Telecom at 1 (15th ed. 2002) (12,934 buildings served); WorldCom, *Hi-Cap Competition* at 4, 6 (Oct. 7, 2002) ("record shows that CLECs have 'lit' no more than 30,000 buildings nationally"; "24 CLECs have a local Lit building footprint totaling 22,600 to augment WorldCom's on-net buildings"), *attached to* Ex Parte Letter from Ruth Milkman, Counsel for WorldCom, to Marlene Dortch, FCC, CC Docket Nos. 01-338, 96-98, 98-147 (Oct. 7, 2002).

network "every day with a real focus at a grassroots, granular level, building by building, address by address."[239] CLECs labor to compare number of buildings they reach with the total number of buildings nationwide, but as the *Fact Report* demonstrated, a small number of buildings in each metropolitan area typically account for a large fraction of the traffic. It has been estimated, for example, that 200 to 300 out of 15,000 multi-tenant units in a typical Tier-One MSA generate 80 percent of the data revenues.[240] And just four MSAs – New York, San Francisco, Washington, D.C., and Los Angeles – generate some 40 percent of all data revenues nationwide.[241]

CLEC Self-Supplied Loops. The *Fact Report* estimated the number of business lines that CLECs were supplying over their own last-mile facilities by subtracting the number of unbundled loops that CLECs are purchasing to serve business customers (1.5 million) from the total number of business lines that they are serving over their own switches (13-20 million).[242] As explained in Part I, the *Fact Report*'s estimate of total business lines served by CLEC switches is reliable and conservative. Conflicting numbers reported by the FCC appear to exclude special access lines that CLECs serve over their own facilities.[243]

A handful of CLECs claim that the *Fact Report*'s estimate of CLEC self-supplied loops is too high because it includes lines that CLECs serve by connecting ILEC-supplied special access lines to the CLECs' switches.[244] The *Fact Report*, they argued, should have subtracted these special access lines from the total number of lines that CLECs serve with their own switches.[245]

The CLECs are correct that the *Fact Report*'s methodology counts special access lines that CLECs have obtained from ILECs as self-supplied CLEC loops. Insofar as tariffed services do supply an alternative to UNEs, and are therefore properly part of this inquiry, the *Fact Report* should have been clearer on this point. But however the Commission opts to treat special access lines obtained under tariff, there is no reason to believe that the number of such lines accounts for a significant fraction of the total CLEC self-supplied loops reported in the *Fact Report*.

Only one CLEC – AT&T – provides any data actually comparing its purchases of special access lines from ILECs with its purchase of unbundled loops. But AT&T does not disclose what fraction of these special access circuits are used to provide *local* traffic; given AT&T's status as the largest long-distance carrier, most of them are undoubtedly used to provide interexchange access, *i.e.*, *long distance* traffic. Such lines are *not* included in the *Fact Report*'s

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[239] *See* David Dorman, President, AT&T, presentation at the Goldman Sachs Communacopia Conference, Transcript of Remarks (Oct. 2, 2002).

[240] *UNE Fact Report 2002* at IV-3 & n.10 (citing Lehman Brothers and McKinsey & Co., *The Future of Metropolitan Area Networks* at 8 (Aug. 24, 2001)).

[241] *Id.*

[242] *See id.* at IV-2, Table 1.

[243] As described in Part I above, although special access lines are, by definition, not switched, CLECs are purchasing special access circuits from ILECs in place of unbundled high-capacity loops in order to connect customer premises to their own local switches.

[244] *See*, *e.g.*, AT&T's Pfau Reply Decl. ¶ 26; WorldCom Reply Comments at 67.

[245] *See*, *e.g.*, AT&T's Pfau Reply Decl. ¶¶ 26-28; WorldCom Reply Comments at 67.

totals because they typically don't generate E911 listings or traffic that is exchanged with ILEC switches via interconnection trunks.

AT&T and other CLECs claim that a Commission rule "force[s]" them to purchase special access circuits in place of high-capacity loops.[246] But the rule in question applies only to special access circuits that are *not* used to provide any significant amount of local traffic.[247] For local traffic, the CLECs should be buying special access services rather than high-capacity loops only where the facilities needed to provision the "EEL" are unavailable and a new special access circuit must be constructed – which occurs only a small percentage of the time. And when EELs are unavailable, the CLEC may request that the ILEC construct a special access circuit that the CLEC may then convert to an EEL down the road.

Finally, if special access lines do somewhat inflate the *Fact Report*'s estimate of CLEC self-supplied loops, other factors deflate it as much or more. As the *Fact Report* explained, many loops that CLECs provide bypass ILEC networks completely, and are not represented in any of the ILEC data on which the *Fact Report* relied. The *Fact Report* estimated, for example, that CLECs provide 11-19 million business lines over their own loops. But AT&T and eleven other CLECs acknowledge serving more than 160 million voice-grade equivalent lines, most of which are undoubtedly special access business lines provided over the CLECs' own facilities, and most of which are excluded from the *Fact Report*'s totals.[248] There is therefore no question that CLECs provide tens of millions of voice-grade equivalent lines over their own last-mile facilities. As AT&T's president recently told the investment community, its "core platform investments are behind us," and AT&T's "scale & ubiquity" in the provision of "access/local services" are one of its "sources of competitive advantage."[249]

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[246] *See*, *e.g.*, AT&T Reply Comments at 292.

[247] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Supplemental Order, 15 FCC Rcd 1760 (1999); *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Supplemental Order Clarification, 15 FCC Rcd 9587 (2000).

[248] To put these totals in perspective, the BOCs collectively serve only about 80 million voice-grade equivalent special access lines, including those resold to CLECs. FCC, *Statistics of Communications Common Carriers 2001/2002 ed.*, at Table 2.6 (Sept. 2002).

[249] David Dorman, President, AT&T, presentation at the Goldman Sachs Communacopia conference, at 6 (Oct. 2, 2002), http://www.att.com/ir/pdf/20021002_dorman.pdf.

APPENDIX A. REGRESSION STATISTICS FOR FIGURE 3

Regression Statistics	
Multiple R	0.333589348
R Square	0.111281853
Adjusted R Square	0.085889906
Standard Error	76.5514423
Observations	37

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	25682.37009	25682.37009	4.382564786	0.04362159
Residual	35	205104.3161	5860.123318		
Total	36	230786.6862			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	176.1182824	18.47842723	9.531021243	2.93427E-11	138.605035	213.6315299	138.605035	213.6315299
X Variable 1	-0.542740755	0.259255669	-2.093457615	0.04362159	-1.069058387	-0.016423122	-1.069058387	-0.016423122

RESIDUAL OUTPUT

Observation	*Predicted Y*	*Residuals*
1	164.6817086	-84.58154541
2	161.1242587	-85.86223133
3	155.5500079	-87.67142408
4	171.5590329	-74.00512552
5	156.0387077	-78.21626524
6	164.7270795	-69.41071426
7	149.0458463	-79.83672262
8	110.8386306	-110.8386306
9	154.8407216	-65.06772904
10	160.3750857	-57.67315098
11	163.4776255	-51.66872187
12	170.5719278	-45.45255639
13	148.3979432	-64.02871731
14	115.8192162	-80.40869573
15	170.906789	-20.40243836
16	174.5127907	12.33454736
17	138.1775816	-16.38682044
18	115.993384	-30.93555181
19	119.2776369	-22.96189929
20	171.7164295	27.77490146
21	168.8805773	26.77929885
22	172.3870631	33.19549921
23	146.22477	12.79945385
24	163.8923289	28.86724488
25	163.312008	39.3996623
26	167.5780313	51.51595292
27	156.448447	44.71720691
28	86.64377052	-9.332317959
29	129.7428434	38.36724246
30	87.70528157	13.6667057
31	158.6275616	79.34263364
32	166.207764	95.8513459
33	139.4136588	84.19314021
34	152.0646896	105.4186678
35	131.1903899	97.88439482
36	69.68926357	103.7361461
37	170.702126	238.8972138

APPENDIX B. ADDITIONAL SOURCES

Table 3. Even in States with Significant UNE-P, CLEC Facilities Came First

New York. AT&T Press Release, *AT&T Offers New Yorkers a New Choice for Local Residential Phone Service* (Dec. 1, 1999); Affidavit of Raymond Crafton and Timothy Connolly on behalf of AT&T Corp., Exhibit E to Comments of AT&T Corp. at 27, *Application of New York Telephone Company (d/b/a Bell Atlantic – New York), Bell Atlantic Communications, Inc., NYNEX Long Distance Company, and Bell Atlantic Global Networks, Inc., for Authorization To Provide In-Region, InterLATA Services in New York*, CC Docket No. 99-295 (FCC filed Oct. 19, 1999); B. Meyerson, *MCI WorldCom to Offer Local Service in New York*, Associated Press (Feb. 4, 1999); Comments of MCI WorldCom, Inc., on the Application by Bell Atlantic – New York for Authorization to Provide In-Region, InterLATA Services in New York at 1, *Application by New York Telephone Company (d/b/a Bell Atlantic – New York), Bell Atlantic Communications, Inc., NYNEX Long Distance Company, and Bell Atlantic Global Networks, Inc., for Authorization To Provide In-Region, InterLATA Services in New York*, CC Docket No. 99-295 (FCC filed Oct. 19, 1999); New Paradigm Resources Group, Inc., *CLEC Report 2002*, Ch. 5 at 70-75 (16th ed. 2002) ("*CLEC Report 2002, 16th ed.*"); New Paradigm Resources Group, Inc., *CLEC Report 1999*, Ch. 8 at 87-90 (10th ed. 1999) ("*CLEC Report 1999, 10th ed.*"). ***Texas.*** Declaration of Phillip W. Tonge and Edwin P. Rutan, II, on Behalf of AT&T Corp. ¶ 5, Exhibit B to Comments of AT&T Corp., *Application of SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region InterLATA Services in Texas*, CC Docket No. 00-4 (FCC filed Jan. 31, 2000); WorldCom Press Release, *MCI Calls On Regulators To Preserve Local Phone Competition* (Aug. 22, 2001); Petition of MCImetro Access Transmission Services LLC for Arbitration of an Interconnection Agreement with Southwestern Bell Telephone Company Under the Telecommunications Act of 1996, Case No. TO-2002-222 at 2 (Tex. PUC filed Aug. 22, 2001); *CLEC Report 2002, 16th ed.*, Ch. 5 at 92-98; *CLEC Report 1999, 10th ed.*, Ch. 8 at 103-107. ***Michigan.*** AT&T Press Release, *AT&T Enters Residential Local Phone Market in Michigan* (Feb.13, 2002); Response of WorldCom to Ameritech's May 15, 2001, Checklist Filing at 2, *On the Commission's Own Motion to Consider AMERITECH MICHIGAN's Compliance with the Competitive Checklist in Section 271 of the Federal Telecommunications Act of 1996*, MPSC Case No. U-12320 (MPSC filed June 29, 2001); *CLEC Report 2002, 16th ed.*, Ch. 5 at 61-62; New Paradigm Resources Group, Inc., *CLEC Report 2001*, Ch. 9 at 107-111 (14th ed. 2001) ("*CLEC Report 2001, 14th ed.*"). ***Georgia.*** AT&T Press Release, *AT&T Offers Georgians a New Choice for Local Phone Service* (Mar. 5, 2002); WorldCom Comments at 1, *Joint Application by BellSouth Corporation, et al., for Authorization to Provide In-Region, InterLATA Services in the Georgia and Louisiana*, CC Docket No. 01-277 (FCC filed Oct. 22, 2001); *CLEC Report 2002, 16th ed.*, Ch. 5 at 45-48; *CLEC Report 2001, 14th ed.*, Ch. 9 at 75-79. ***Florida.*** WorldCom Press Release, *WorldCom Calls BellSouth Long Distance Bid Premature* (July 20, 2001); Comments of WorldCom at 8, *Application by Verizon for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Services in the State of New Jersey*, CC Docket No. 01-347 (FCC filed Jan. 14, 2002); *CLEC Report 2002, 16th ed.*, Ch. 5 at 39-45. ***Illinois.*** AT&T Press Release, *AT&T To Offer Residential Local Service in Illinois Starting in June* (Apr. 22, 2002); Affidavit of Sherry Lichtenberg Regarding Mass Market Issues at 2, *attached to* WorldCom Comments, *On the Commission's Own Motion to Consider AMERITECH MICHIGAN's Compliance with the Competitive Checklist in Section 271 of the Federal Telecommunications Act of 1996*, MPSC Case No. U-12320 (MPSC filed June 29, 2001); *CLEC Report 2002, 16th ed.*, Ch. 5 at 48-50; *CLEC Report 2001, 14th ed.*, Ch. 9 at 83-86. ***Pennsylvania.*** *Phone Service On Hold Worldcom Waits for Verizon's Tests*, Patriot - News (Sept. 28, 2000); Declaration of Vigetha Huffman on Behalf of WorldCom, Inc. ¶ 3, *Application by Verizon for Authorization to Provide In-Region, InterLATA Services in Pennsylvania* (FCC filed Aug. 6, 2001); AT&T Press Release, *AT&T To Offer Residential Local Phone Service in Philadelphia, Pittsburgh* (Sept. 19, 2002); *CLEC Report 2002, 16th ed.*, Ch. 5 at 84-87; New Paradigm Resources Group, Inc., *CLEC Report 2001*, Ch. 8 at 163-169 (13th ed. 2001).

Table 4. Publicly Reported CLEC Line Totals vs. E911 Listings Used in the Fact Report

AT&T. *Q2 2002 AT&T Earnings Conference Call – Final,* Financial Disclosure Wire, Transcript 072302au.729 (July 23, 2002) (AT&T reports that it serves 3.3 million business access lines, of which 15 percent (or 495,000) are served via UNE-P.). ***Cox.*** Cox, *The Case for Cable Telephony* at 1 (Oct. 2002), http://www.cox.com/PressRoom/supportdocuments/CaseCableTelephonyOctober2002.doc. ***McLeodUSA.*** McLeodUSA Press Release, *McLeodUSA Reports Second Quarter 2002 Results* (July 31, 2002) (McLeod reported 461,951 customers, with each customer having an average of 2.7 access units, for total line count of 1,247,267 lines, of which McLeod claims 58 percent are served via resale or UNE-P). ***Choice One.*** Choice One Press Release, *Choice One Reports Second Quarter 2002 Results* (Aug. 14, 2002). ***RCN.*** RCN Press Release, *RCN Announces Second Quarter Results* (Aug. 7, 2002). ***ITC^DeltaCom.*** ITC^DeltaCom Press Release, *ITC^DeltaCom Reports Strong Operating Improvements in First Quarter of 2002* (Apr. 18, 2002) (reporting 275,835 total lines); ITC^DeltaCom Press Release, *ITC^DeltaCom Reports Third Quarter 2001 Results* (Oct. 30, 2001) (reporting that 81 percent of lines are on-switch) (81 percent of 275,835 lines = 223,426). ***NuVox.*** NuVox Press Release, *NuVox Communications Announces Strong Continued Growth in Second Quarter* (Aug. 15, 2002). ***TDS MetroCom.*** Initial Comments of NuVox Inc., KMC Telecom, Inc., e.spire Communications, Inc., TDS Metrocom, Inc., Metromedia Fiber Network Services, Inc. and SNiP LiNK, LLC at 6-7, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, et al.*, CC Docket Nos. 01-338, 96-98 and 98-147 (FCC filed April 5, 2002). ***Conversent.*** Reply Comments of Conversent Communications, LLC at 2, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, et al.*, CC Docket Nos. 01-338, 96-98 and 98-147 (FCC filed July 17, 2002). ***CTSI.*** CTE Press Release, *CTE Achieves EBITDA of $39 Million for the 2002 Second Quarter, Reflecting 15% Growth, Versus 2001 Second Quarter EBITDA of $34 Million, Excluding CTSI's Expansion Markets* (July 23, 2002). *See* Table 2. Growth of CLEC Voice-Grade Equivalent Lines Reported to Investors for sources for CLEC-Reported Voice Grade Equivalent Lines.

Table 5. Cable Telephony Growth in 2002

AT&T. AT&T Press Release, *Earnings Commentary: Quarterly Update – First Quarter 2002* at 10 (Apr. 24, 2002); AT&T Press Release, *Earnings Commentary: Quarterly Update – Second Quarter* 2002 at 11 (July 23, 2002). ***Cablevision.*** Cablevision Systems News Release, *Cablevision Systems Corporation Reports Fourth Quarter 2001 Financial Results for Cablevision NY Group and Rainbow Media Group* (Feb. 14, 2002); Cablevision Systems News Release, *Cablevision Systems Corporation Reports Second Quarter 2002 Financial Results – Cablevision NY Group and Rainbow Media Group* (Aug. 8, 2002). ***Charter.*** Charter Communications, Inc., Form 10-K405 (SEC filed Mar. 29, 2002); Charter Communications, Inc., Form 10-Q (SEC filed Aug. 6, 2002). ***Cox.*** Cox Communications, Inc. Form 10-K405 at 5 (SEC filed Mar. 26, 2002); Cox Communications, Inc. Press Release, *Pro Forma Operating Results* at 13 (July 31, 2002), http://www.cox.com/pressroom/ProForma1.pdf. ***Comcast.*** Applications and Public Interest Statement, *Applications for Consent to the Transfer of Control of Licenses, Comcast Corporation and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-070 at 13 (FCC filed Feb. 28, 2002). ***Insight.*** Insight Communications Company, Inc. Form 10-K405 at 9 (SEC filed Mar. 27, 2002); Insight Communications Press Release, *Insight Communications Announces Second Quarter 2002 Results* (July 23, 2002). ***Knology.*** Knology, Inc. Press Release, *Knology Reports Positive*

EBITDA for 2001 with Significant Growth in Connections and Revenue (Mar. 11, 2002) (Knology Broadband on-net telephone connections); Knology, Inc. Press Release, *Knology Reports Growth in Connections, Revenue & EBITDA* (Aug. 12, 2002). ***Midcontinent.*** Top 25 MSOs, *Multichannel News* (Aug. 12, 2002). ***RCN.*** RCN Corp. Press Release, *RCN Announces Second Quarter 2002 Results* (Aug. 7, 2002) (Connections: Voice).

Table 6. Cable Telephony Penetration Rates

AT&T. Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation, July 2001, at 16-17; *Comcast Purchase of AT&T Means More Services*, Silicon Valley/San Jose Bus. J. at 11 (Jan. 4, 2002); *To Business, National and Technology Editors*, PR Newswire (Apr. 23, 2002); J. Blitz, *Taking the Telephony Plunge: Why Now?*, Multichannel News (June 24, 2002); *Q2 2002 AT&T Earnings Conference Call – Final*, Financial Disclosure Wire, Transcript 072302au.729 (July 23, 2002) (quoting William Schleyer, president and CEO, AT&T Broadband). ***Cox.*** Cox, *The Case for Cable Telephony* at 2 (Apr. 2002), http://www.cox.com/PressRoom/Case%20for%20Cable%20Telephony.pdf; Cox, *Cox Communications Omaha Investor Meeting* at 10 (May 9, 2002), http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=cox&script=10959&layout=6&item_id='http://media.corporate-ir.net/media_files/NYS/cox/presentations/AnalystMeetingMay2002.ppt'; Cox, *The Case for Cable Telephony* at 2 (Oct. 2002), http://www.cox.com/PressRoom/supportdocuments/CaseCableTelephonyOctober2002.doc. ***Knology.*** Knology Press Release, *Knology Reports Growth in Connections, Revenue and EBITDA* (Aug. 12, 2002) (Knology Broadband data). ***RCN.*** RCN Press Release, *RCN Announces Second Quarter 2002 Results* (Aug. 7, 2002) (voice connections divided by marketable homes).

Table 7. Independent Analysts Confirm That ILECs Face Significant Intermodal Competition

Eastern Management Group. R. Saunders and A. Bankowski, Eastern Management Group, *Competition in the Telecom Sector: CLECs, Cable and Wireless Are Making Waves Despite the Downturn* at 10 (Apr. 1, 2002). ***Merrill Lynch.*** M. Morin, *et al.*, Merrill Lynch Capital Markets, Investext Rpt No. 8559720, What's Up With Telecoms? – Substitution Effects Take Their Toll – Industry Report at *1 (May 21, 2002); L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *2 (Apr. 22, 2002). ***Morgan Stanley.*** S. Flannery, *et al.*, Morgan Stanley, Dean Witter, Investext Rpt. No. 8648493, Wireline Telecom Services – 2Q02 Preview: Lowering The Bar – Industry Report at *10 (July 18, 2002). ***Salomon Smith Barney.*** J. Grubman, *et al.*, Salomon Smith Barney, Investext Rpt. No. 8593838, AT&T Corp. – Company Report at *2 (June 14, 2002). ***Schwab Capital Markets.*** P. Glenshur, Vice President, Schwab Capital Markets, statement before the House Committee on Financial Services, Subcommittee on Domestic Monetary Policy, Technology and Economic Growth, Washington, DC (Apr. 18, 2002). ***Telecompetition Inc.*** *New Telecompetition Study Reveals Mobile Carrier Threat to Wireline*, Business Wire (May 29, 2002).